

# Annual Summary of Ohio's Deer Program

## Our Deer Management Strategy

The goal of Ohio's deer program is to provide a deer population that maximizes recreational opportunities including viewing, photographing, and hunting, while minimizing conflicts with agriculture, motor travel, and other areas of human endeavor. This has been the Division of Wildlife's goal for over 50 years.



OHIO DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WILDLIFE

Spring 2021

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### DID YOU KNOW?

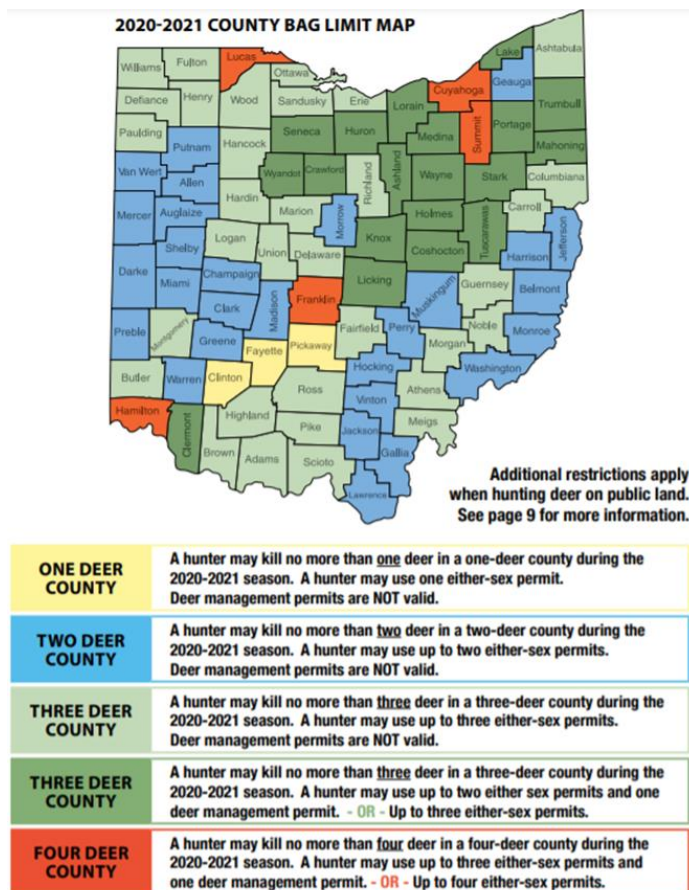
- The 2020-21 season marked the first time in over a decade that deer permit sales increased over the prior year.
- A record 93,576 deer were harvested during the 2020-21 archery season.
- In December 2020, routine surveillance detected the first case of CWD in Ohio’s wild deer population.
- New regulations have helped reduce the antlerless harvest on public land by an average of 38% since 2018.



## SEASONS AND PERMITS

A valid hunting license (resident = \$19, nonresident = \$180.96, youth = \$10, senior = \$10) and a deer permit (resident either-sex = \$31.20, nonresident either-sex = \$76.96, deer management = \$15, youth = \$16, senior = \$12) are required to hunt deer in Ohio. Hunters could harvest up to six deer with a combination of either-sex and deer management permits (where valid, Figure 1); however, they were limited to one deer management permit per county. Deer management permits were valid in 23 counties during the first nine weeks of the archery season, as well as during all Division of Wildlife controlled hunts. Deer harvested during controlled hunts (maximum of six) did not count against a hunter's statewide or county bag limits.

Figure 1. Harvest regulations for the 2020-21 season as presented in the Ohio Hunting and Trapping Regulations, Publication 5085.



As always, hunters were limited to one antlered deer and had the opportunity to hunt deer during Ohio's four seasons, including archery (Sep. 26, 2020 - Feb. 7, 2021), gun (Nov. 30 - Dec. 6, 2020), bonus gun (Dec. 19-20, 2020), and muzzleloader (Jan. 2-5, 2021). Youth (17 and under) season was Nov. 21-22, 2020.

The Division of Wildlife issued 409,808 deer permits during the 2020-21 license year, 4.2% more than last year and the first year in more than a decade that sales have increased (Table 1). Even with an increase over the previous year, permit sales for 2020-21 were still down more than 34% from the recent peak in 2009-10. The decreasing trend is likely due to several factors including fewer available permits. As noted, deer management permits were only valid in 23 counties in 2020-21. As a result, deer management permit sales were down 84% compared to the 2013-14 season (the last season that these permits were valid statewide). While the herd is growing (see "Understanding Population Trends" on page 24), deer populations in many areas are still smaller than they were in the mid- to late-2000s (Figure 2). Finally, and most notably, the number of deer permits issued is largely dependent upon the number of hunters participating. While the number of individuals purchasing at least one deer permit in 2020 increased 4% over 2019, this still represents a decline of 17% since 2012 (Figure 3).

Figure 2. Statewide buck harvest and population trend, 1977-2020.

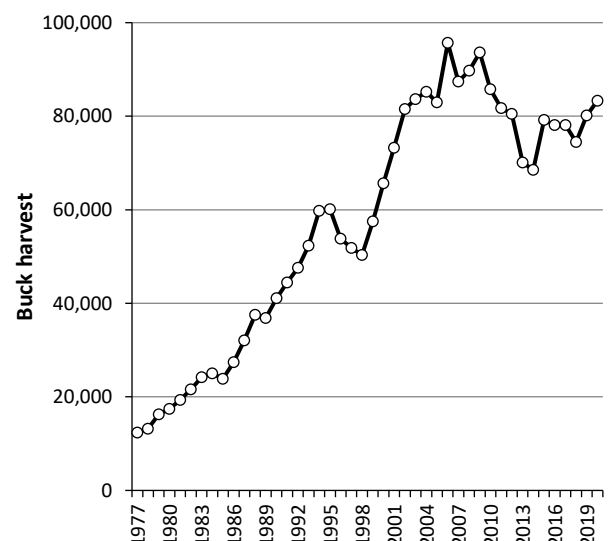


Table 1. Deer permits issued, 2007 - 2020.

Year	Permit			Total
	Youth	Either-Sex	Antlerless-only <sup>1</sup>	
2007-08	65,647	411,522	101,197	578,366
2008-09	67,338	396,704	147,400	611,442
2009-10	67,828	394,620	162,460	624,908
2010-11	66,300	380,462	162,655	609,417
2011-12	62,864	377,302	163,383	603,549
2012-13	64,634	397,333	126,918 <sup>2</sup>	588,885
2013-14	60,961	373,315	101,400	535,676
2014-15	58,227	378,921	57,230	494,378
2015-16	58,055	392,533	15,514	466,102
2016-17	52,706	373,791	18,669	445,166
2017-18	49,529	367,753	11,724	429,006
2018-19	42,781	345,408	11,117	399,306
2019-20	45,755	339,077	8,535	393,367
2020-21	50,490	346,620	12,698	409,808

<sup>1</sup>Antlerless-only permits were renamed "Deer Management Permit" in 2019.

<sup>2</sup>Restrictions on the use of the antlerless permit began in 2012 and continued through 2019.

Figure 3. Number of deer permit buyers, by permit type, 2011 – 2020.



## HARVEST SUMMARY

Hunters harvested 197,721 deer during the 2020-21 season, 9% more than the three-year average (Table 2). The total includes 83,332 bucks, 94,763 does, and 19,626 button bucks. Coshocton County once again led the state with 6,791 deer killed. A harvest summary by season for the top five counties is presented in Table 3, and a complete harvest summary by county and season is available in Appendix 1.

The harvest total during the traditional statewide gun season was 71,651 deer, 9% more than the three-year average (Table 2). Coshocton, Tuscarawas, Ashtabula, Muskingum, and Knox counties led the state in gun harvest (Table 3). The bonus gun season harvest was 14,864 deer. Tuscarawas County hunters led the way, harvesting 592 deer during the two-day season, with Ashtabula, Coshocton, Knox, and Licking counties rounding out the top five.

Archers reported harvesting 93,576 deer, the largest archery harvest on record and nearly 14% more than the three-year average (Table 2). Archers accounted for 47% of the entire deer harvest, and for the eighth year in a row, more deer were taken during archery season than the week of gun season. By comparison, just 15 years ago the archery harvest only accounted for less than 30% of the annual harvest (Figure 4). This shift in the harvest is likely due to the ever-increasing interest and participation in archery hunting. In 1981, only about one-third of gun hunters also bowhunted. In 2020, nearly 75% of gun hunters also hunted the archery season.

Figure 4. Percent of the total annual deer harvest taken during the archery and traditional 7-day gun season, 1977-2020.

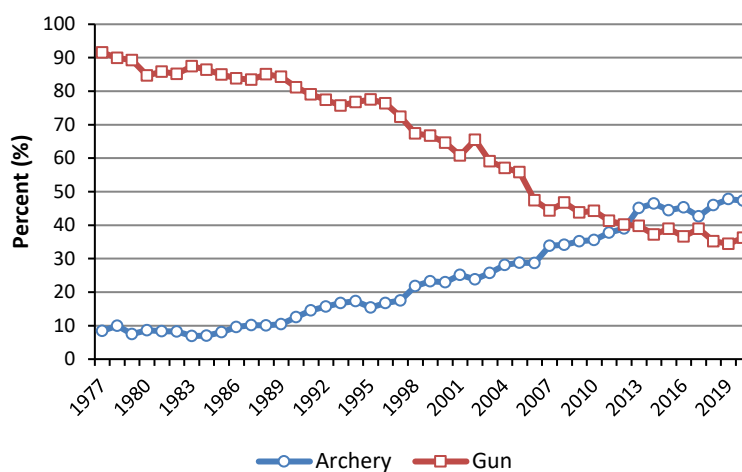


Table 2. Buck, doe, button buck, and total harvests by season, 2020-21 and three-year average<sup>1</sup>.

	Bucks <sup>2</sup>		Does		Buttons		Total		
	2020	3yr avg.	2020	3yr avg.	2020	3yr avg.	2020	3yr avg.	Diff. (%)
<b>Gun</b>									
Traditional (7-day)	25,051	24,524	38,089	33,559	8,511	7,483	71,651	65,566	9.3
Bonus (2-day)	4,422	3,838	8,740	7,170	1,702	1,453	14,864	12,461	19.3
Youth	3,031	3,195	2,047	2,056	717	658	5,795	5,909	-1.9
<b>Total</b>	<b>32,504</b>	<b>31,557</b>	<b>48,876</b>	<b>42,784</b>	<b>10,930</b>	<b>9,594</b>	<b>92,310</b>	<b>83,935</b>	<b>10.0</b>
<b>Archery</b>									
Crossbow	32,815	27,589	26,537	22,062	5,528	4,408	64,880	54,059	20.0
Vertical Bow	14,422	13,870	12,422	12,347	1,852	1,909	28,696	28,126	2.0
<b>Total</b>	<b>47,237</b>	<b>41,459</b>	<b>38,959</b>	<b>34,410</b>	<b>7,380</b>	<b>6,317</b>	<b>93,576</b>	<b>82,185</b>	<b>13.9</b>
<b>Muzzleloader</b>									
	2,844	3,792	5,789	7,523	1,075	1,379	9,708	12,695	-23.5
<b>Total</b>	<b>83,332</b>	<b>77,585</b>	<b>94,763</b>	<b>85,765</b>	<b>19,626</b>	<b>17,572</b>	<b>197,721</b>	<b>180,921</b>	<b>9.3</b>

<sup>1</sup>Average of 2017-18, 2018-19, and 2019-20 seasons.

<sup>2</sup>Includes bucks at least 1.5 years old with antlers less than three inches in length (2,470), and bucks with shed antlers (861).

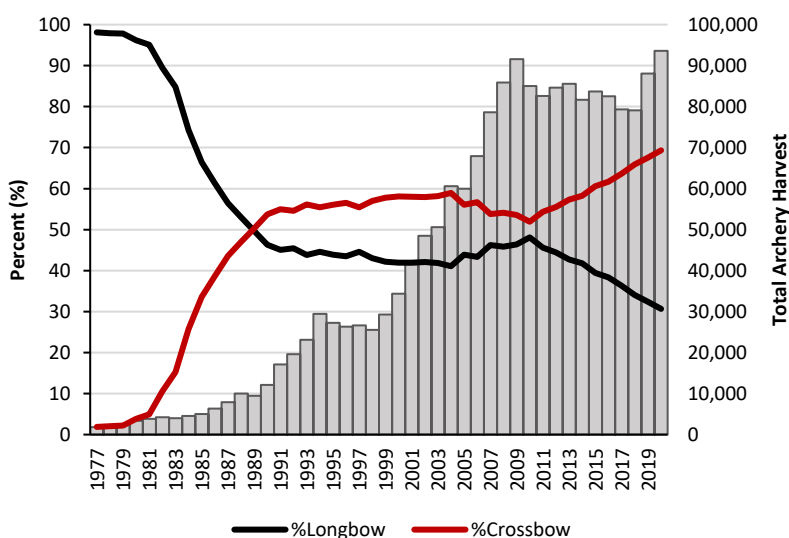
Table 3. Buck, doe, button buck, and total harvest by season for the top five counties, 2020-2021.

Season	County	Bucks*	Does	Buttons	Total	Rank	
						2020	2019
<b>Gun</b>	Coshocton	678	1,356	247	2,281	1	1
	Tuscarawas	665	1,272	261	2,198	2	2
	Ashtabula	632	1,200	335	2,167	3	4
	Muskingum	683	1,163	239	2,085	4	3
	Knox	648	1,132	226	2,006	5	5
<b>Bonus Gun</b>	Tuscarawas	169	357	66	592	1	3
	Ashtabula	135	344	89	568	2	1
	Coshocton	115	350	52	517	3	2
	Knox	114	272	51	437	4	4
	Licking	112	281	39	432	5	7
<b>Crossbow</b>	Coshocton	1,113	980	164	2,257	1	1
	Licking	998	761	141	1,900	2	3
	Tuscarawas	897	819	128	1,844	3	2
	Ashtabula	815	785	234	1,834	4	4
	Trumbull	669	728	231	1,628	5	6
<b>Vertical Bow</b>	Coshocton	493	493	51	1,037	1	1
	Licking	449	430	33	912	2	3
	Tuscarawas	399	452	60	911	3	2
	Knox	386	381	50	817	4	5
	Holmes	301	394	43	738	5	6
<b>Muzzleloader</b>	Coshocton	92	236	39	367	1	1
	Tuscarawas	88	224	32	344	2	4
	Licking	85	182	23	290	3	3
	Guernsey	76	168	35	279	4	5
	Muskingum	84	152	27	263	5	2
<b>Youth</b>	Coshocton	121	88	30	239	1	1
	Holmes	107	90	26	223	2	3
	Tuscarawas	101	81	24	206	3	2
	Muskingum	82	76	14	172	4	6
	Knox	79	61	28	168	5	4
<b>Total</b>	Coshocton	2,644	3,555	592	6,791	1	1
	Tuscarawas	2,343	3,241	574	6,158	2	2
	Ashtabula	1,946	2,904	812	5,662	3	3
	Licking	2,318	2,746	485	5,549	4	5
	Knox	2,016	2,715	516	5,247	5	6

\*Includes bucks at least 1.5 years old with antlers less than three inches in length and bucks with shed antlers.

Crossbow hunters harvested 64,880 deer, an increase of 20% over the three-year average (Table 2). Crossbows accounted for a record 69% of the archery harvest in 2020, continuing a trend that has been occurring over the last several years (Figure 5). Coshocton County led the state with 2,257 deer, followed by Licking, Tuscarawas, Ashtabula, and Trumbull counties. The vertical bow harvest (compounds, recurves, and longbows) was 28,696 deer, 2% above the three-year average. Coshocton County archers led the state with a harvest of 1,037 deer. Licking, Tuscarawas, Knox, and Holmes were the other top vertical bow harvest counties.

Figure 5. Total archery harvest and proportion taken by crossbows and longbows, 1977-2020.



There were 9,708 deer harvested during the four-day statewide muzzleloader season, 24% fewer than the three-year average harvest (Table 2). Coshocton County was the top spot for muzzleloader hunters with a harvest of 367 deer, followed by Tuscarawas, Licking, Guernsey, and Muskingum counties.

Youth hunters took 5,795 deer during the 2-day youth season, 2% fewer than the three-year average (Table 2). Top harvest counties for the two-day youth season were Coshocton, Holmes, Tuscarawas, Muskingum, and Knox counties.

### Nonresident Hunters

Among permit buyers, nonresident hunters accounted for 10.4% of the deer permits issued and 9.8% of the harvest. Approximately 14% of all adult permit buyers were nonresidents, and, among this group, they accounted for 17.6% of the antlered harvest in the 2020-21 season. Just over 15% of the nonresident harvest (2,082 deer) was taken on public land, which is nearly three times the rate of residents (5.7%). The nonresident harvest was 70% antlered. By comparison, the resident harvest was only 38% antlered. The top five nonresident states (by total harvest) were Pennsylvania (2,567), Michigan (1,812), West Virginia (1,320), North Carolina (1,056), and Florida (911). The top five counties for nonresident deer harvest were Pike (19.9%), Adams (19.5%), Meigs (19.2%), Athens (18.4%), and Lawrence (16.5%).

More than two-thirds of the nonresident harvest (67%) occurred during archery season, with the gun and muzzleloader seasons accounting for an additional 23% and 6%, respectively (Table 4). Nonresidents took a much larger percentage of their harvest during archery season than either residents or landowners. Almost three-quarters (73%) of the antlered and over half of the antlerless deer harvested by nonresidents were taken during archery season.

Table 4. Percentage of antlered, antlerless, and total harvest by season, for adult residents, nonresidents, and landowners during the 2020-21 deer season.

	Antlered Harvest			Antlerless Harvest			Total Harvest		
	Resident	Non-resident	Landowner	Resident	Non-resident	Landowner	Resident	Non-resident	Landowner
<b>Archery</b>	58	73	57	44	53	37	49	67	45
<b>Gun</b>	32	19	35	40	32	47	37	23	43
<b>Bonus Gun</b>	6	3	5	10	5	10	8	4	8
<b>Muzzleloader</b>	3	4	3	6	11	6	5	6	5

## Landowners

Landowners reported harvesting 56,800 deer, almost 29% of the total harvest. The proportion of the harvest taken by landowners increased substantially from 1995 (19%) to 2005 (28%), remained relatively stable at 27-28% until 2017, and has increased each year since. While the total landowner harvest was nearly equally split between the gun (43%) and archery (45%) seasons, there was a notable difference in the timing of antlered and antlerless harvests. Most (57%) antlered deer were taken during the archery season (Table 4), but 63% of antlerless deer were taken in the firearms seasons. Landowner proportion of the total county harvest varied considerably across the state but was greatest among southeastern counties. Meigs County led the state with landowners accounting for 42% of the total reported harvest. Landowners also accounted for a significant portion of the total harvest in Washington (41%), Holmes (40%), Athens (39%), and Monroe (38%) counties.

## Public Land

While public land only accounts for roughly 4% of the total land area in the state, resident and nonresident hunters reported harvesting 12,503 deer, 6.3% of the season total, on public land. Antlered bucks accounted for 46% of the public land harvest, slightly more than the proportion of antlered bucks in the private land harvest (40%). It is worth noting that the proportion of antlered bucks in the public land harvest increased substantially with the implementation of antlerless harvest restrictions in 2018. Prior to the public land antlerless restrictions, antlered deer comprised only 38% of the public land harvest – a bit lower than the average private land harvest (41%). With just over 80,000 acres of public land including the Wayne National Forest, Crown City Wildlife Area, and Dean State Forest, Lawrence County once again held the top spot for the proportion of harvest taken on public land (25%). The other top counties were Hocking (17.1%), Vinton (16.0%), Muskingum (13.9%), and Lucas (13.6%). Nonresident hunters accounted for more than 25% of the public land harvest in six of the top 10 counties (Table 6).

Table 6. Public land and total harvest, by residency status, in the top 10 counties for public land acreage during the 2020-21 deer season.

County	Public Land			Resident Harvest			Nonresident Harvest				
	Acres*	% of Total Land in County	% of County Harvest	Public Land	County Total	% of Harvest Taken on Public Land	Public Land	County Total	% of Harvest Taken on Public Land	% of County's Total Harvest Taken by NR	% of County's Public Land Harvest Taken by NR
Lawrence	82,000	28	24.6	282	1,415	19.9	135	280	48.2	16.5	32.4
Scioto	72,000	18	11.6	174	1,836	9.5	70	274	25.5	13.0	28.7
Muskingum	50,000	12	13.9	513	4,493	11.4	205	678	30.2	13.1	28.6
Vinton	49,000	19	16.0	222	1,773	12.5	116	337	34.4	16.0	34.3
Hocking	45,000	17	17.1	307	2,277	13.5	142	356	39.9	13.5	31.6
Washington	40,000	10	7.0	172	2,813	6.1	55	420	13.1	13.0	24.2
Morgan	38,000	14	13.5	335	2,655	12.6	88	475	18.5	15.2	20.8
Coshocton	37,000	10	9.0	468	6,095	7.7	146	696	21.0	10.2	23.8
Athens	33,000	10	11.9	278	2,599	10.7	101	585	17.3	18.4	26.6
Monroe	31,000	10	8.0	154	2,239	6.9	45	255	17.6	10.2	22.6

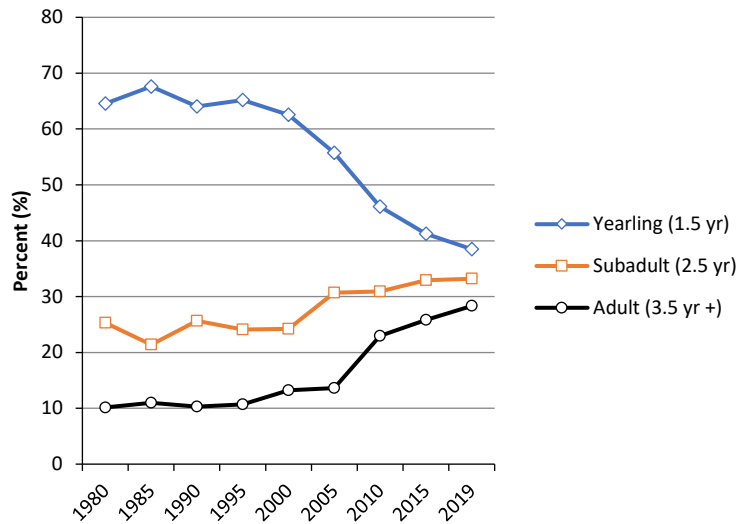
\*Lands open to public hunting that are owned or administered by the ODNR or U.S. Forest Service (Wayne National Forest), rounded to the nearest 1,000 acres.



## Deer Age Structure

Due to the COVID-19 pandemic, Division of Wildlife staff did not collect age data from harvested deer in 2020. In 2019, Division of Wildlife personnel aged 5,099 deer during the weeklong gun season (8% of the reported harvest) from 51 processors in 44 counties as well as from three inspection stations in the Disease Surveillance Area of Holmes and Tuscarawas counties. Figure 6 shows how the age structure of the antlered harvest has changed over time. The proportion of yearlings in the antlered buck harvest has been steadily declining since the late 1990s. In the early to mid-1980s, nearly 70% of the bucks harvested were yearlings. Today, that percentage is below 40%. A reduction of this magnitude would normally be a result of some type of regulation change, such as antler point restrictions. In Ohio's case, the decline in yearling buck harvest is likely due to at least two factors. Most importantly, Ohio hunters seem to be aware of the benefits of allowing bucks to mature and have acted on their own self-imposed restrictions. Second, the growth of the deer herd over time, coupled with liberal antlerless harvest opportunities, likely reduced the pressure on the antlered segment of the population.

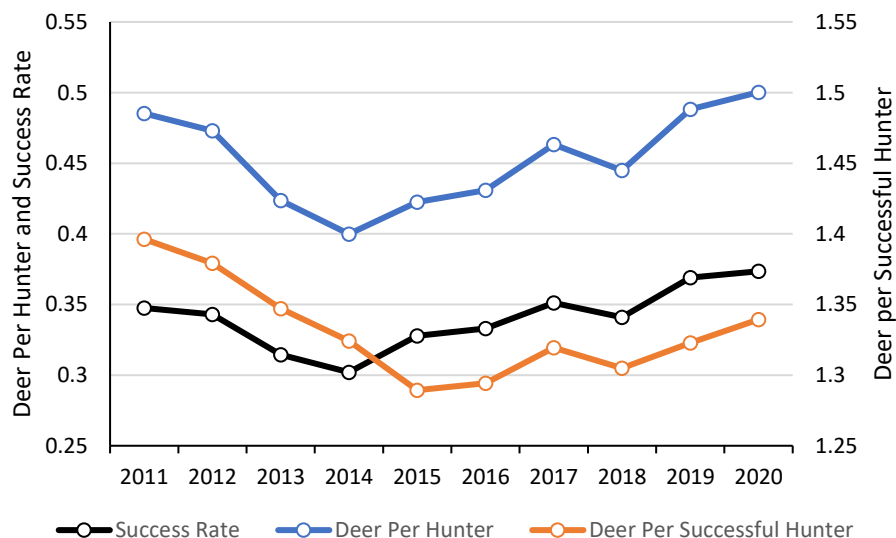
Figure 6. Statewide trends in antlered buck age structure based on a sample of the gun season harvest, 1980 – 2019.



## HUNTER SUCCESS, PARTICIPATION, AND EFFORT

In the 2020-21 season, 199,878 resident adults purchased at least one either-sex or deer management permit and 74,657 harvested at least one deer, resulting in a 37% hunter success rate (Table 7, Figure 7). Hunter success rates differed markedly on public and private land. Just over 36% of private land hunters were successful, as compared to only 14% of public land hunters. Because our deer hunter surveys are limited to resident adult hunters, rates may be different for nonresident hunters, as well as youth, disabled veterans, free and reduced cost seniors, and landowners.

Figure 7. Success rate and average number of deer per hunter and per successful hunter, 2011-2020.



During the 2020-21 season, 78% of hunters bowhunted, while 79%, 44% and 32% reported hunting in the gun, bonus gun, and muzzleloader seasons, respectively (Table 7; Figure 8). Hunter effort remained relatively constant at an average of 19.5 days from 2001-2015, but dipped slightly to an average of 16.4 days from 2016-2019. During the 2020-21 season, archery, gun, and muzzleloader hunters spent, on average, 19.4, 3.8, and 2.2 days hunting those seasons, respectively, with hunters averaging 19.5 days in the field over the course of the entire season (Table 8). Roughly one in five gun hunters reported a deer harvest and archery hunters posted a success rate just over 25% (Table 7). When considering success rates, it is important to remember that success in any particular season is very much dependent upon success in other seasons. Approximately 75% of gun hunters are also bow hunters that likely hunt prior to the gun season. Because most hunters participate in multiple seasons and many choose to hunt bucks only, season-specific success rates have limited value and certainly cannot be compared with other states where hunters have season-specific permits. Additionally, these estimates are derived from surveys of adult, resident hunters that purchased a deer permit. Therefore, season participation and success rates of nonresidents, youth, disabled veterans, seniors, and landowners are currently unknown.

Figure 8. Season-specific hunter participation rates based on results of the 2020-21 deer hunter survey.

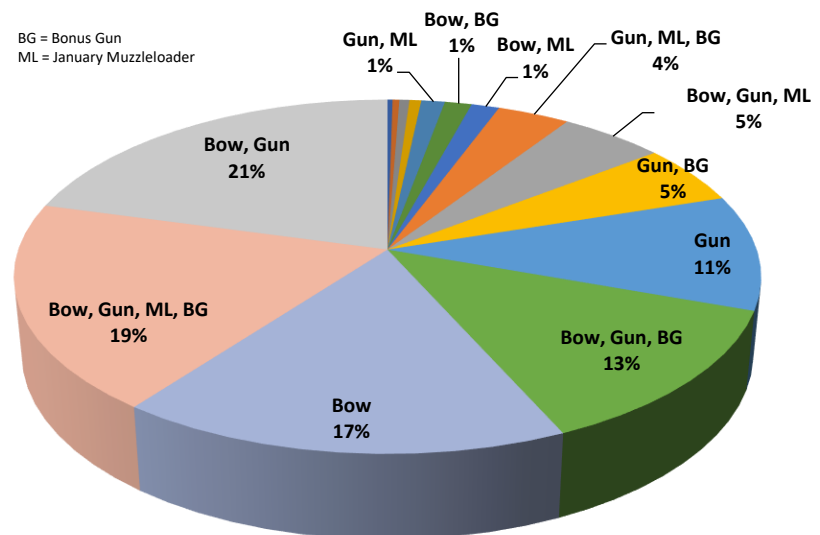


Table 7. Participation and success rates for the 2020-21 deer season compared to the three-year average<sup>1</sup>.

	Participation Rate (%)		Estimated Number of Hunters		Number of Successful Hunters		Success Rate (%)	
	2020	3yr avg.	2020	3yr avg.	2020	3yr avg.	2020	3yr avg.
<b>Nonresident</b>			<b>35,893</b>	<b>38,331</b>	<b>11,340</b>	<b>12,286</b>	<b>31.6</b>	<b>32.1</b>
<b>Resident</b>			<b>199,878<sup>2</sup></b>	<b>198,258</b>	<b>74,657<sup>3</sup></b>	<b>70,098</b>	<b>37.4<sup>4</sup></b>	<b>35.4</b>
Private			188,830 <sup>5</sup>	186,951	68,815	63,977	36.4	34.3
Public			56,032 <sup>6</sup>	52,651	7,746	7,822	13.8	14.8
<b>Archery</b>	78 <sup>7</sup>	74	156,211 <sup>8</sup>	146,675	39,648	35,493	25.4	24.3
<b>Gun</b>	79	78	157,055	155,456	32,821	30,668	20.9	19.7
<b>Bonus Gun</b>	44	42	87,109	84,233	7,772	6,669	8.9	7.9
<b>Muzzleloader</b>	32	36	63,250	71,959	4,993	6,534	7.9	9.1

<sup>1</sup>Average of 2017-18, 2018-19, and 2019-20 deer seasons.

<sup>2</sup>The number of adult resident hunters who purchased at least one deer permit during the 2020-21 season. Excludes non-residents, youth, seniors, disabled veterans, and landowners.

<sup>3</sup>The number of adult resident hunters that reported harvesting at least one deer during the 2020-21 season.

<sup>4</sup>The number of successful adult resident hunters divided by the total number of adult resident hunters that purchased a deer permit.

<sup>5</sup>Among respondents to the 2020-21 deer hunter survey, 94.4% indicated that they hunted at least once on private land. This rate is applied to the known number of licensed adult hunters to estimate the total number hunting private land at least once during the 2020-21 season.

<sup>6</sup>Among respondents to the 2019-20 deer hunter survey, 28.0% indicated that they hunted at least once on public land. This rate is applied to the known number of licensed adult hunters to estimate the total number hunting public land at least once during the 2020-21 season.

<sup>7</sup>Among respondents to the 2020-21 deer hunter survey, 78% indicated that they hunted at least one day during the 2020-21 archery season.

<sup>8</sup>Estimated total number of licensed resident adults that hunted during the 2020-21 archery season. Estimate is based on an 78% participation rate among the 199,878 resident adults who purchased at least one deer permit during the 2020-21 deer season.

Table 8. Average number of days spent hunting in 2001, 2011-13, and 2015-20 deer seasons.

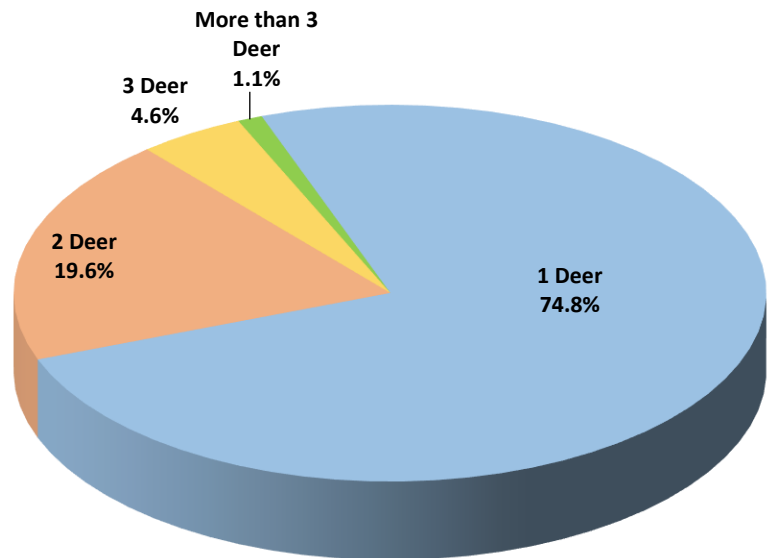
	2001	2011	2012	2013	2015	2016	2017	2018	2019	2020
<b>Archery</b>	20.8	19.3	19.2	19.7	20.3	17.0	16.3	15.4	15.7	19.4
<b>Gun</b>	3.8	4.0	3.9	3.7	3.7	3.5	3.5	3.4	3.7	3.8
<b>Bonus Gun</b>	-	1.6	1.5	-	1.6	1.5	1.5	1.5	1.5	1.6
<b>Muzzleloader</b>	2.8	2.4	2.2	2.0	2.1	2.1	2.1	2.1	2.2	2.2
<b>All Seasons</b>	17.3	19.9	20.0	19.7	20.3	18.0	16.6	15.1	16.0	19.5

From 2011 to 2014, there was a steady decline in the number of deer taken per hunter. In 2011, 243,126 resident adults harvested 117,988 deer, or 0.49 deer per hunter. This figure declined to 0.47 in 2012, 0.42 in 2013, and in 2014 there were 0.40 deer harvested per resident adult. However, this trend began to reverse in 2015 increasing to 0.50 deer harvested per hunter in 2020. Similarly, there was a steady decline in the number of deer taken by successful hunters from a high of 1.40 in 2011 to a low of 1.29 in 2015. Slight increases have occurred since, with successful hunters taking 1.34 deer in 2020 (Figure 7).

Fifteen years ago, in spite of large deer populations and liberal bag limits, only 18% of successful hunters harvested more than one deer during the 2006 season. This changed dramatically with the introduction of the \$15 antlerless permit in 2007. From 2007 to 2011, there was a steady increase in the percentage of successful hunters harvesting more than one deer, peaking at 27% in 2011. Then, as deer populations were reduced and restrictions were placed on the use of the antlerless deer permit, the proportion of hunters taking more than one deer steadily declined, reaching 22% in 2016. Not surprisingly, given that all significant measures of the deer population indicate herd growth has occurred recently, the proportion of hunters harvesting more than a single deer increased to 25% in 2020. Of important note is the fact that statewide bag limits have little impact on both the number of deer harvested per hunter and the percentage of hunters harvesting multiple deer. For example, in 2012 the statewide bag limit was 18 deer. That year, successful hunters averaged 1.40 deer and only 27% reported harvesting more than one. The following year, the statewide bag limit was reduced by 50% to nine deer, yet the proportion of hunters bagging multiple deer and the average number of deer harvested dropped by just 3%.

As in years past, the vast majority of successful hunters (75%) harvested only a single deer in the 2020-21 season. Nearly 20% of successful hunters bagged two deer, 4.6% harvested three, and 1.1% took four or more deer (Figure 9). Again, to emphasize the limited influence of a large bag limit, of successful hunters, 1% or less harvest more than three deer in a single season, and specifically in 2020, only 126 of the 199,878 permit buyers (0.06%, or about 1 out of every 1,650 hunters) filled their 6-deer bag limit.

Figure 9. Percent of successful hunters taking one, two, three, or more than three deer during the 2020-21 season.



# DISEASE UPDATE

## Hemorrhagic Disease

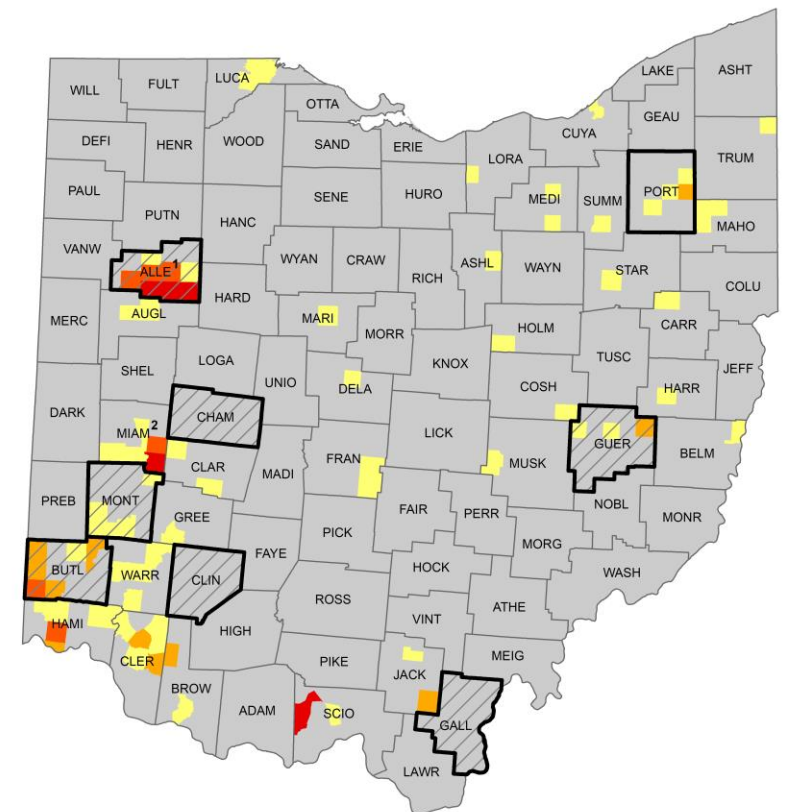
Hemorrhagic Disease (HD) is the most important viral disease of white-tailed deer in the United States. It is caused by related orbiviruses of the epizootic hemorrhagic disease (EHD) or bluetongue (BT) virus serogroups. Since disease caused by EHD and BT viruses are indistinguishable without laboratory testing, the general term, hemorrhagic disease (HD), is often used. The virus is transmitted by biting flies of the genus *Culicoides*, which are commonly called midges, sand gnats, or no-see-ums. For this reason, the occurrence of HD is seasonal, and coincides with periods of the year when these biting flies are abundant - typically late July through November. The first hard freeze of the fall causes a sudden decline in *Culicoides* activity, eliminating new cases of HD.

Deer develop signs of illness about seven days after exposure and symptoms include loss of appetite and fear of humans, excessive salivation, rapid pulse and respiration rate, and high fever (which cause deer to seek water to lie in to reduce their body temperature). Midwestern deer populations have developed little resistance to HD and are likely to die within three days of the onset of symptoms. Hemorrhagic disease does not affect humans, impact the safety of consuming venison, nor pose a serious threat to cattle (EHD generally does not affect sheep, but BT can cause serious disease). The severity and distribution of HD outbreaks are highly variable. While HD outbreaks only occur sporadically in Ohio (recent significant disease events include 2007, 2012, and 2017), they can be severe with locally high mortality. Presently, there are no wildlife management tools that can prevent or control HD. While significant localized mortality can cause alarm among the public, past experiences show that HD will not eliminate entire populations, the disease will come to an end with the onset of cold weather, and deer populations will bounce back within a few years.

In 2020, the Division of Wildlife documented significant HD mortality in a few Ohio counties, primarily Allen and Miami (Figure 10). Reports of dead or sick deer indicated that HD activity was sporadic across the state in 2020, but most widespread in southwestern Ohio. Samples taken from around the state confirmed HD activity in eight different counties.

The Division of Wildlife relies heavily on reports from the public to document HD activity every summer and fall. Our online species reporting page is the most efficient means to gather public reports of dead or sick deer. Please help us track HD activity each year by visiting <https://apps.ohiodnr.gov/wildlife/speciessighting/> to report any deer that appear sick or those that you find dead during late summer or early fall.

Figure 10. Number of sick or dead deer reported from August-November, 2020. Clusters of townships with multiple reports would suggest EHD as the most likely cause.



<sup>1</sup> 161 deer reported dead/sick in Allen County

<sup>2</sup> 78 deer reported dead/sick in Miami County

\*OH Dept. of Agriculture, Animal Disease Diagnostic Laboratory



## Chronic Wasting Disease

Chronic Wasting Disease (CWD) is a fatal disease of the central nervous system of mule deer, white-tailed deer, elk, moose, and reindeer. CWD is caused by abnormal proteins, or prions (not a bacteria or virus), that ultimately destroy brain tissue. CWD can be spread through direct animal-to-animal contact or by contact with saliva, urine, feces, carcass parts of an infected animal, or contaminated materials in the environment (plants and soil). Prions released into the environment through bodily fluids or diseased carcasses are extremely resistant to degradation and can remain infectious for years. CWD is known as a transmissible spongiform encephalopathy, a family of diseases that includes bovine spongiform encephalopathy (mad cow disease), scrapie in sheep, and Creutzfeldt-Jakob Disease in humans.

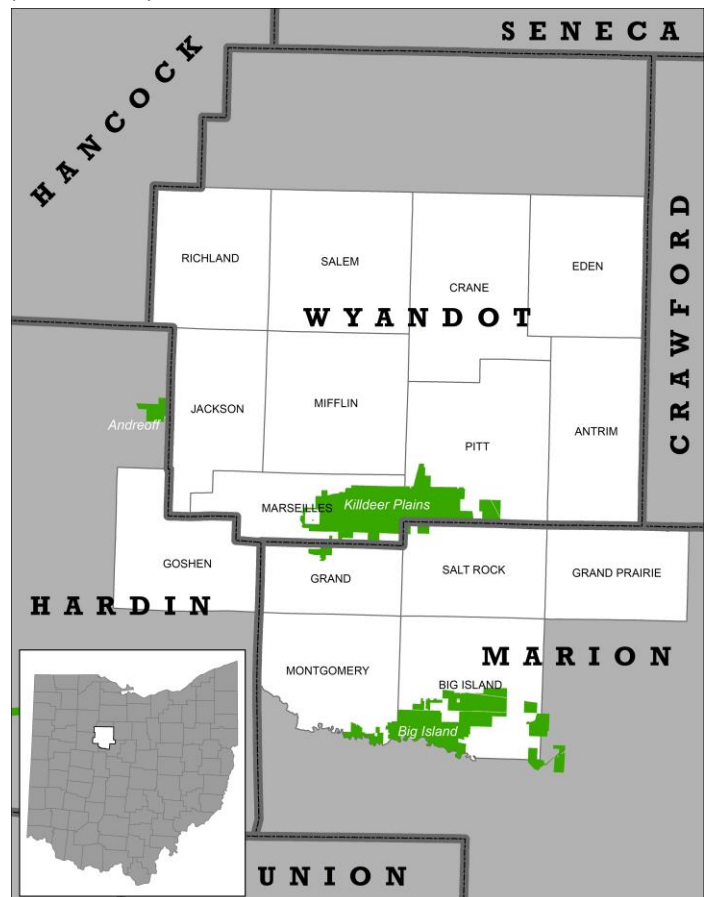
Since 2002, the Division of Wildlife has conducted statewide CWD surveillance, testing 28,613 deer. In 2020, a record 4,654 deer were submitted for CWD testing. Division of Wildlife staff collected 853 road-killed deer from all 88 counties and hunters submitted 3,176 deer via cooperating taxidermists and processors. An additional 287 deer were submitted by hunters at collection and inspection stations. Additional deer (338) were collected and tested through various means (deer displaying abnormal behavior and/or poor physical condition, found dead under suspicious circumstances, removed in conflict or culling situations, etc.). For the first time ever, CWD was detected in a wild Ohio deer.

### Positive Detections in the Wild Population

In December 2020, the Division of Wildlife received test results that a mature buck harvested in southern Wyandot County tested positive for CWD. The buck was presented to a cooperating taxidermist who was aiding the Division of Wildlife with tissue collections as part of our routine disease surveillance. Given the significant delay between the time the deer was shot and when it was ultimately recovered (9 days), only the head was delivered to the taxidermist. Division of Wildlife staff visited the site of the harvest, collected and properly disposed of the carcass, and removed the top layer of soil in an effort to reduce environmental contamination. Upon detection, a 15-township area surrounding the positive location was designated for enhanced surveillance (Figure 11) where hunters were encouraged to submit deer for testing throughout the remainder of the deer season, particularly during the 2-day bonus gun and muzzleloader seasons. Additionally, given the proximity to Killdeer Plains Wildlife Area and Refuge, all deer harvested on the remaining controlled hunts were submitted for testing ( $n = 171$ ). This additional surveillance produced a second positive, a yearling doe that was harvested during a controlled hunt on the Killdeer Plains refuge.

Additional culling efforts were implemented on the refuge and surrounding area following the deer season to 1) obtain more information about the prevalence and distribution of the disease, 2) reduce population density (aerial surveys revealed an abnormally high deer density within and surrounding the refuge), and 3) potentially remove additional CWD-positive deer from the herd. In three nights of operations, Division of Wildlife staff removed and tested 72 deer with no additional positive detections.

Figure 11. Enhanced surveillance area covering 15 townships in portions of Wyandot, Marion, and Hardin counties.



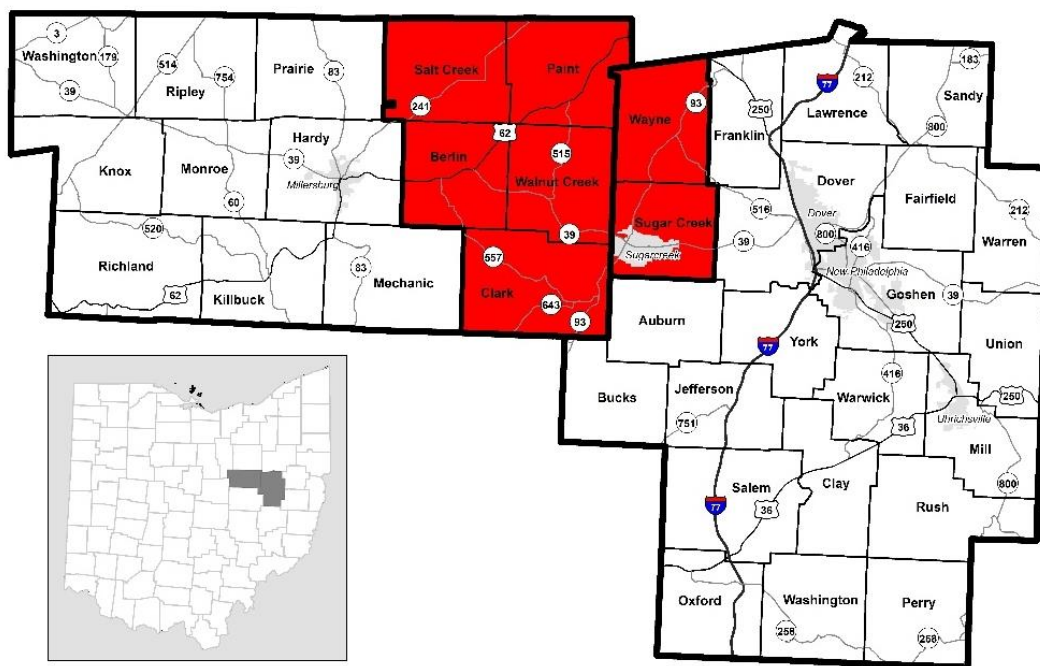
## Disease Surveillance Area

In October 2014, a mature buck from a shooting preserve in Holmes County tested positive for CWD, becoming the first-ever CWD-positive deer in Ohio. The shooting preserve was depopulated in April 2015, and testing revealed no additional CWD-positive animals. Subsequent testing of nearly 300 free-ranging deer in an eight-township area around the shooting preserve failed to detect any CWD-positive deer as well. However, in spring of 2015, two more CWD-positive deer were reported from a captive white-tailed deer breeding pen in Holmes County. This herd was depopulated in June 2015, and 16 additional deer tested positive for the disease. In response to these findings, the Division of Wildlife conducted targeted surveillance in the immediate vicinity of the infected facility during the summer of 2015, collecting 18 deer (including two that had escaped from captive facilities), with none testing positive for CWD.

Additionally, the focus area in 2015 was expanded to include two townships in southern Wayne County, and the 10-township focus area was declared a Disease Surveillance Area (DSA, visit [wildohio.gov](http://wildohio.gov) for specific regulations pertaining to a DSA). The 10-township DSA in central Holmes and southern Wayne counties expired on July 31, 2018 after three seasons of intensive surveillance revealed no CWD-positive animals in the wild herd. However, due to the early 2018 discovery of three additional CWD-positives in an eastern Holmes County captive facility, a new, 7-township DSA was established (Figure 12). During the 2020-21 season, 175 hunter harvested deer from DSA 2018-01 were collected at inspection stations during Ohio's 7-day gun season. Again, CWD was not detected in any of the deer tested.

In April 2020, a female mule deer on a farm in southeastern Wayne County tested positive for CWD. A second mule deer doe tested positive in June 2020, and, following depopulation of the herd in August 2020, one additional white-tailed deer buck tested positive. These additional positives bring the total number of positive detections in captive herds to 25. Given the low prevalence of disease in the facility, low deer densities in the surrounding area, and history of surveillance in the area, no additional action was taken in response to this event.

Figure 12. Disease Surveillance Area 2018-01 (DSA)



 Disease Surveillance Area 2018\_01

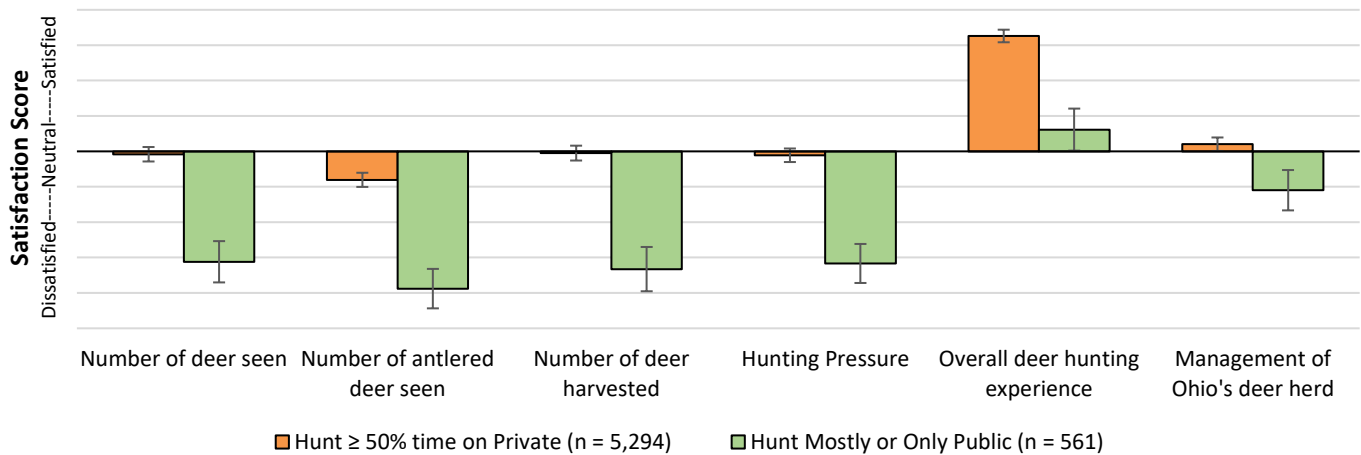
Effective Date: August 1, 2018

## A CLOSER LOOK AT THE 2020-21 SEASON

### Public Land Regulations

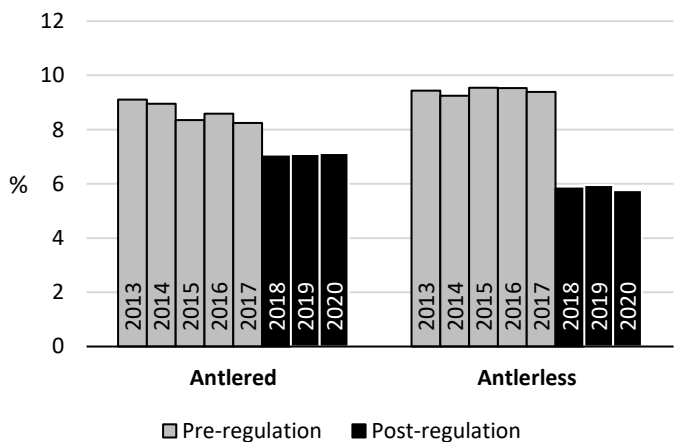
The only significant harvest regulation change made in the last few years was for public hunting areas (defined in Ohio Administrative Code, 1501:31-15-04, as the areas listed at [wildohio.gov](http://wildohio.gov)). The regulations were: 1) a statewide limit of one antlerless deer, and 2) no antlerless deer after the close of the 7-day gun season (remainder of season was buck-only). This regulation change was due to the feedback received from deer hunter surveys over the past several years. In a 2015-16 survey, nearly two-thirds of those that self-identified as hunting mostly or exclusively public land indicated support for reducing antlerless harvest on public lands to encourage herd growth. Additionally, when compared to the general population of resident deer hunters, those hunting public land have reported much lower satisfaction for various aspects of their hunting experience (Figure 13).

Figure 13. Satisfaction scores of public vs private land hunters based on three years of deer hunter surveys, 2015-2017.



The 2020-21 season marked the third season under the public land harvest restrictions. Due to several factors that annually influence the harvest, it is difficult to isolate the impact of the public land harvest restrictions. However, public land harvests from 2018-2020 were significantly lower than the typical harvest in the years preceding the regulation change (Figure 14). For reasons not completely understood, though possibly related to the regulation's impact on hunter behavior, the 2018-2020 antlered harvest averaged 10% lower (5,393) than the pre-regulation average (6,329). The antlerless harvest averaged 6,353, which was 38% lower than the pre-restriction average (10,311). An impact of this magnitude suggests that the regulations were an effective means of reducing the antlerless harvest. While the limit of one antlerless deer on public land will remain in effect for the 2021-22 season, hunters will be permitted to harvest their one antlerless deer at any point during the deer season. The Division of Wildlife will continue monitoring harvest trends, populations, and hunter attitudes to determine if the reduction in antlerless harvest results in herd growth and improvements in hunter satisfaction.

Figure 14. Percent of the statewide total antlered and antlerless harvests taken on public land, 2013-2020.



## Impact of COVID-19

For the first time in decades, due to precautions surrounding the COVID-19 pandemic and social distancing recommendations, Division of Wildlife staff did not collect age, sex, and condition data from deer harvested during the gun season. Likewise, inspection stations in the Disease Surveillance Area were converted into unmanned drop-off locations. While it cannot be said with absolute certainty, it appears that deer hunting participation was affected positively by the pandemic as the 2020-21 season saw an increase in deer permit sales (+4.2%) for the first time in more than a decade. Similar trends across the nation were noted in 2020, where a survey of 40 states revealed an overall increase in hunting license sales of approximately 5%.

## Relationship between Muzzleloader and Bonus Gun Harvests

The 23% decline in the muzzleloader harvest was in direct contrast to the nearly 20% increase in the 2-day, bonus gun season, and, in fact, the combined harvest between these two seasons has been roughly 25,000 over the last few years. Poor bonus gun season harvests typically result in more deer harvested in the muzzleloader season and vice versa. For example, the 2016 bonus gun harvest was just 9,228 and nearly 16,000 deer were harvested a few weeks later during the muzzleloader season. The 2020 season was just the opposite with a stellar bonus gun season resulting in nearly 15,000 deer and a muzzleloader harvest just shy of 10,000.

## Straight-walled Cartridge Rifles

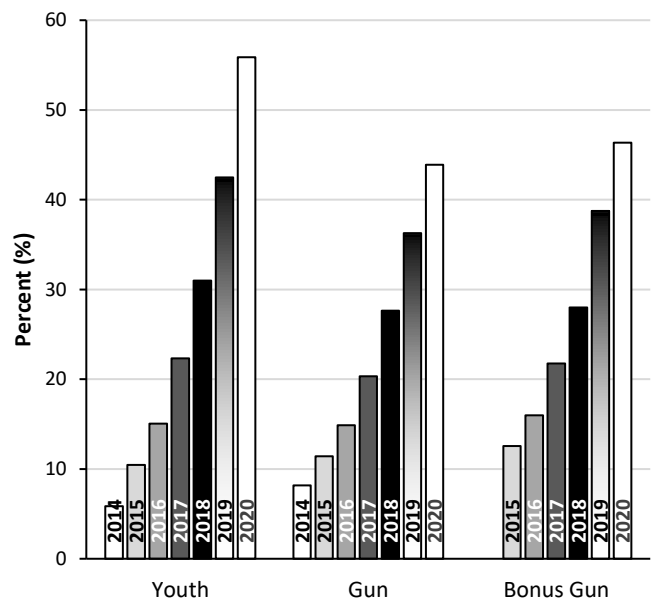
The 2020-21 season marked the seventh year that straight-walled cartridge (SWC) calibers were legal for deer hunting. Hunters harvested 3,239, 31,462, and 6,892 deer with SWC rifles during the youth, gun and bonus gun seasons, respectively, accounting for 56%, 44%, and 46% of the total reported harvest during those seasons. The proportion of the harvest taken with SWC rifles has increased each year since the 2014 season when they were first legalized for deer hunting (Figure 15). According to the results of the 2020-21 Deer Hunter Effort and Harvest Survey (a survey of adult resident hunters), 43% still used a shotgun during the traditional seven-day gun season, 12% used a muzzleloader, and 42% used a SWC rifle. The 450 Bushmaster was the most popular choice among hunters, with 30% opting for this caliber. Other popular choices included the 350 Legend (27%), .45-70 (27%), and the 44 Magnum (8%).

## Firearms Season Weather

Firearms hunters across much of the state were greeted with a wet opening day of gun season. However, snow blanketed a large portion of the state for several days throughout the week of gun season, and again for the bonus season. This rare occurrence of having snow on the ground for both firearms seasons likely

contributed to the increased harvest in the 2020-21 season as the presence of snow is generally associated with more favorable hunting conditions by increasing visibility and making it easier to track and recover downed animals. Most notably, snow and the associated cold temperatures likely encourages hunter movement which in turn forces deer to move, thereby increasing their vulnerability to harvest.

Figure 15. Proportion of youth, gun, and bonus gun season harvest taken with straight-walled cartridge rifles, 2014-2020.



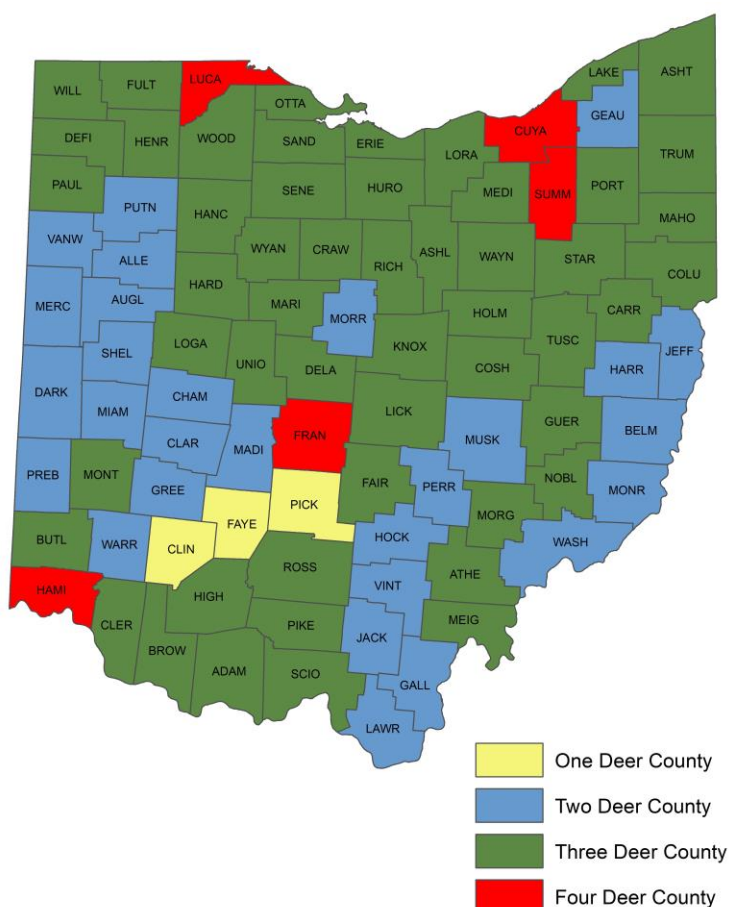


## 2021-22 SEASON PREVIEW

In the mid- to late-2000s, deer populations across most of the state had reached record-highs - well above population goals that had been established in 2000. Through a combination of liberal bag limits, reduced cost antlerless permits, education on the importance of an adequate doe harvest, and other programmatic changes; deer populations in most areas of Ohio were reduced to goal (or nearly to goal) by 2014. Starting in 2013, regulations became increasingly conservative to alleviate harvest pressure on antlerless deer and stabilize populations. Predictably, the results of the 2015 population goal setting process indicated that most areas of the state could tolerate moderate herd growth (see *Periodic Goal-Setting Survey* on page 20 for more information), and, consistent with these desires, data indicate that deer populations in most areas of the state are increasing.

Season dates, aside from minor calendar adjustments, will remain the same for the 2021-2022 season. After several seasons with stable regulations, some changes to county bag limits and usage of the deer management permit (DMP) were made for the 2020-21 season in response to the results of the latest goal-setting survey as well as the observed trends in harvest and population indices. While the recently revised county bag limits will remain unchanged for the 2021-22 season (Figure 16), important changes have been made concerning the use of the DMP. For the first time since the 2013-14 season, the DMP will be valid in all 88 counties. Unlike previous seasons where hunters were allowed only one DMP per county, hunters may use up to the county bag limit (e.g., in a 4-deer county, a hunter will now have the option to use up to four DMPs to harvest four antlerless deer). Additionally, given the purpose of the DMP is to provide incentive to increase antlerless harvest where additional harvest is desired, DMPs will not be valid for use on public hunting areas where additional antlerless harvest is not necessary at this time.

Figure 16. Deer harvest regulations for 2021-22 season.



# BUCKEYE BIG BUCK CLUB

The Buckeye Big Buck Club (BBBC) was founded by former Division of Wildlife biologist and writer Merrill C. Gilfillan in 1957. The primary purposes of the organization are to increase the appreciation of Ohio's white-tailed deer herd, maintain a permanent record of Ohio's trophy deer, and foster wise management of the resource. Membership is open to any hunter that legally harvests a qualifying deer (minimum 140 inches typical or 160 inches non-typical). The Club hosts a banquet each year to showcase deer entering the club and recognize the hunters that harvested them (most deer entering the Club in any given year were harvested in the season prior). Since the 2021 banquet was not held due to COVID-19, the following tables are from the most recently held banquet in February 2020. The list of special award winners can be found in Table 10, the top three 2020 entries by implement in Table 11, and the top five typicals and non-typical of all time in Table 12. A searchable database, containing all 19,161 bucks entered in the Club, is available online at <https://apps.ohiodnr.gov/wildlife/bigbuck/>, and a list of official scorers can be found in Appendix 2.

Table 10. 2020 Buckeye Big Buck Club special award winners.

Award	Description	Name	Score	County
<b>Guilliams-McWilliams Trophy</b>	Top typical	Matthew Hoehn	186 <sup>2</sup> / <sub>8</sub>	Auglaize
<b>Hill-Hill Trophy</b>	Top non-typical	William Gibson, Jr.	225 <sup>1</sup> / <sub>8</sub>	Clermont
<b>BBBC Young Hunter Award</b>	Youngest new member	Ireland McGee – Age 9	140 <sup>5</sup> / <sub>8</sub>	Belmont
		Braden St. Clair – Age 8	148 <sup>4</sup> / <sub>8</sub>	Guernsey
		Brody Snider – Age 8	140 <sup>7</sup> / <sub>8</sub>	Perry
<b>George Applegarth Senior Hunter Award</b>	Oldest new member	Roy Noel – Age 83	179 <sup>1</sup> / <sub>8</sub>	Pike
<b>Lori Byers Female Hunter Award</b>	Top scoring typical and non-typical by a female	Typical – Lori Byers	159 <sup>2</sup> / <sub>8</sub>	Ashland
		Non-typical – Lindsey Hawk	197 <sup>1</sup> / <sub>8</sub>	Highland
<b>Division of Wildlife Employee of the Year</b>	Outstanding contributions to deer management	Bob Ford		
<b>President Weisenbarger Award</b>	Outstanding service to the BBBC	Will Ogden		

Table 11. 2020 Buckeye Big Buck Club top three typical and non-typical entries by implement type.

Implement	TYPICAL			NON-TYPICAL		
	Name	Score	County	Name	Score	County
<b>Longbow</b>	Matthew Hoehn	186 <sup>2</sup> / <sub>8</sub>	Auglaize	William Gibson, Jr.	225 <sup>1</sup> / <sub>8</sub>	Clermont
	Dean Herron	177 <sup>3</sup> / <sub>8</sub>	Allen	William Stuckey, Jr.	223 <sup>5</sup> / <sub>8</sub>	Ross
	Roger Jewell, Jr.	171 <sup>4</sup> / <sub>8</sub>	Franklin	Bryan Levan	222 <sup>6</sup> / <sub>8</sub>	Logan
<b>Crossbow</b>	Dick Holsapple	173 <sup>7</sup> / <sub>8</sub>	Darke	Jeffrey Thieman	222 <sup>3</sup> / <sub>8</sub>	Morgan
	Jeremy McBeth	172 <sup>6</sup> / <sub>8</sub>	Auglaize	Mark Garland	210 <sup>3</sup> / <sub>8</sub>	Morrow
	Tyler Warman	172 <sup>3</sup> / <sub>8</sub>	Clermont	Michael Sugg	198 <sup>5</sup> / <sub>8</sub>	Fulton
<b>Shotgun</b>	Dennis Carver	170 <sup>1</sup> / <sub>8</sub>	Morrow	Jeff Stimmel	218 <sup>2</sup> / <sub>8</sub>	Delaware
	Brock Leachman	166 <sup>5</sup> / <sub>8</sub>	Muskingum	Brandon Miller	190 <sup>1</sup> / <sub>8</sub>	Henry
	Tyler Massie	164 <sup>3</sup> / <sub>8</sub>	Gallia	Harry Puckett	186 <sup>4</sup> / <sub>8</sub>	Delaware
<b>Muzzleloader</b>	Tyler Grys	171 <sup>1</sup> / <sub>8</sub>	Huron	Corwin Heatwole	216 <sup>2</sup> / <sub>8</sub>	Vinton
	Weston Baker	162 <sup>7</sup> / <sub>8</sub>	Shelby	Tom Murphy	189 <sup>1</sup> / <sub>8</sub>	Ashland
	Christopher Ruchty	160 <sup>1</sup> / <sub>8</sub>	Preble	Mike Rhodes	178 <sup>7</sup> / <sub>8</sub>	Guernsey
<b>Rifle</b>	Rick Scott	166 <sup>3</sup> / <sub>8</sub>	Guernsey	John Boblenz	204 <sup>7</sup> / <sub>8</sub>	Marion
	Jonathan Blosser	163 <sup>2</sup> / <sub>8</sub>	Defiance	Christian Knellinger	191 <sup>2</sup> / <sub>8</sub>	Noble
	Makenna Medlen	158 <sup>3</sup> / <sub>8</sub>	Jefferson	Nathan Wells	189 <sup>3</sup> / <sub>8</sub>	Clinton
<b>Handgun</b>	Steven Leopold	169 <sup>3</sup> / <sub>8</sub>	Hardin			
	Joshua Owen	164 <sup>5</sup> / <sub>8</sub>	Columbiana			
	Randy Wilhelm	141 <sup>4</sup> / <sub>8</sub>	Knox			

Table 12. Buckeye Big Buck Club's top five typical and non-typical entries of all time.

	Rank	Hunter	Harvest Year	County	Implement	Score
<b>Typical</b>	1	Brad Jerman	2004	Warren	Crossbow	201 $\frac{1}{8}$
	1	William Kontras	1986	Clark	Vertical Bow	201 $\frac{1}{8}$
	3	Tim Reed	2004	Muskingum	Vertical Bow	198 $\frac{3}{8}$
	4	Steve Davis	2016	Clinton	Crossbow	194 $\frac{3}{8}$
	5	John Daugherty	2006	Wayne	Shotgun	193 $\frac{1}{8}$
<b>Non-typical</b>	1	Michael Beatty	2000	Greene	Vertical Bow	304 $\frac{4}{8}$
	2	Jonathan Schmucker	2006	Adams	Crossbow	295 $\frac{3}{8}$
	3	Daniel Coffman	2015	Fairfield	Vertical Bow	287 $\frac{5}{8}$
	4	Dave Kopp	2016	Stark	Crossbow	267 $\frac{3}{8}$
	5	Chester Veach	1971	Pike	Shotgun	261 $\frac{5}{8}$

While some biases exist in the data (differences in regional/local awareness of the Club, varying interest in entering a qualifying deer, regional availability of official BBBC scorers and scoring events, etc.), a summary of the record book entries provides a general indication of how trophy deer are distributed throughout the state. For instance, it should be no surprise that over the course of the Club's history, the counties with the most record book entries are those in east-central and southeast Ohio, where deer have typically been most abundant and buck harvests the largest (Figure 17). However, accounting for differences in population size shows that a larger percentage of the bucks harvested in western Ohio counties end up in the BBBC (Figure 18). All else being equal, if you were fortunate enough to harvest a buck, the odds that it qualifies for the BBBC are much better if it came from Auglaize County than if it was a deer from Ashtabula County.

Figure 17. Total Buckeye Big Buck Club entries by county.

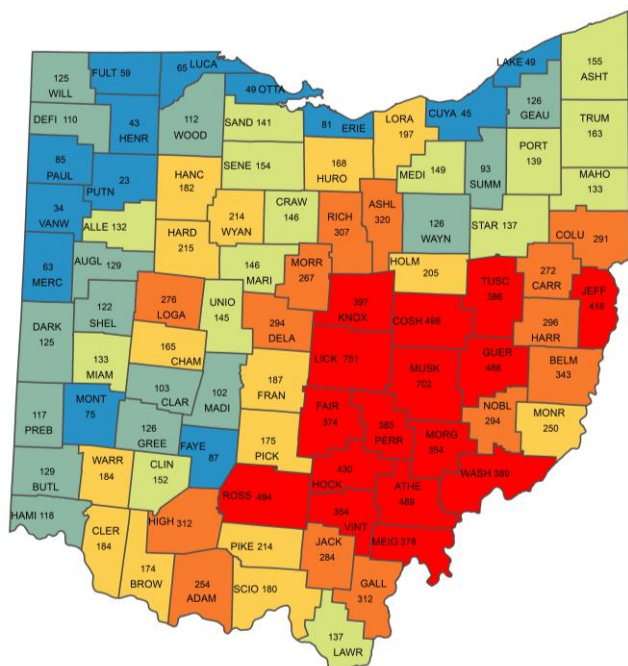
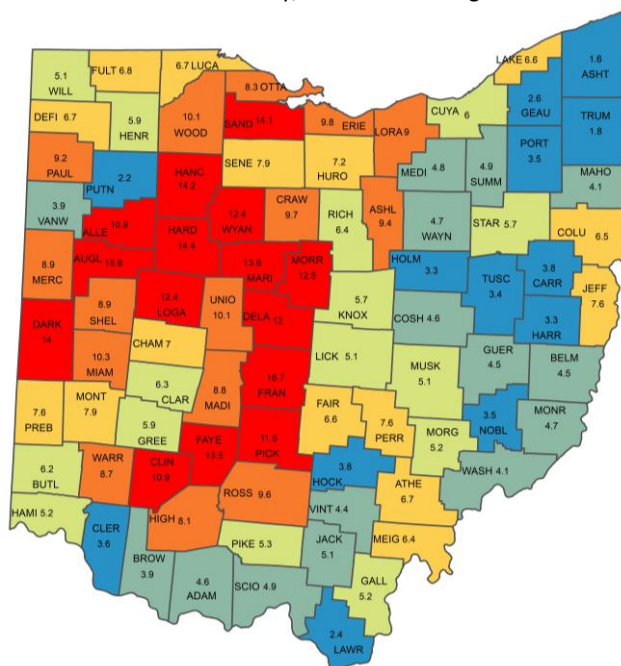


Figure 18. Number of Buckeye Big Buck Club entries for every 1,000 bucks harvested in the county, 2009-2018 average.



# HUNTER FEEDBACK

Hunter surveys comprise a vital piece of the deer management process. Information gleaned from these surveys are critical for monitoring changes in hunter participation, effort, and deer observations as well as gathering opinions on various deer management issues. The Division of Wildlife's deer program utilizes three primary surveys, with each serving a unique purpose.

## ***Annual Deer Hunter Survey***

Each year since 2011, and periodically over the last several decades, the Division of Wildlife has sent surveys to a random sample of adult resident deer permit buyers. The primary purpose of this survey is to monitor hunter participation and effort. In fact, much of the information provided in previous sections of this publication is derived from this annual survey. We also utilize this survey to collect hunter opinions on specific deer management issues that may be used to inform policy making decisions and develop or adjust deer hunting regulations. However, responses to this survey have been lacking in recent years, making detailed analyses of the data very difficult (in 2019, of the 9,505 hunters invited to participate, only 1,216 hunters (13%) completed the survey).

## **Changes to Survey Methodology**

Prior to the 2020 season, we identified several aspects of the survey methodology that could be contributing to poor response rates. In the past, survey participants were selected at the beginning of the archery season to advise hunters to keep track of their hunting activities over the course of the deer season. Unfortunately, to randomly select hunters for the survey at the beginning of the season, participants were chosen from a list of prior-year permit buyers. This method likely resulted in the selection of some participants that did not hunt the current season. In fact, we know that the annual churn among Ohio deer hunters is approximately 25% - that is, one in four hunters that purchased a license this year will not hunt next season. Additionally, the survey format could have resulted in survey fatigue and incomplete surveys, as participants were asked to return to the survey multiple times over the course of the season to update their hunting activities.

In 2020, several changes were made to the survey methodology to boost survey responses. The most significant change was delaying participant selection and survey distribution until the end of the season. This modification accomplished three things: 1) we were able to select participants from the list of hunters that had purchased a deer permit for the current season, 2) by sending the survey at the close of the season, participants could complete the survey in one sitting, and 3) we could condense the period of time that the survey was active, thereby introducing some measure of urgency. Survey invitations were successfully delivered via email to 14,491 randomly selected, resident deer permit buyers and we received 3,626 complete responses – a response rate of 25%. While still somewhat low, it appears that changes to the survey methodology resulted in a significant boost over the historical response rate of 10-15%.

## **Deer Hunter Opinions and Satisfaction**

Measuring hunter attitudes and opinions is a critical component of evaluating Ohio's deer program. Of particular importance is an annual assessment of hunter satisfaction regarding the hunting experience. The number of deer observed or otherwise perceived to be on the landscape appears to be the primary driver of hunter satisfaction – in essence, tracking hunter attitudes over time can serve as a proxy for tracking deer population size. According to population indices (Figure 23), deer populations hit a recent low in 2014 and have been gradually increasing since. Likewise, hunter surveys since 2015 mirror this trend with decreases in the proportion of hunters reporting “too few deer” when asked their opinion of the deer herd in the area hunted most often (Figure 19). In the 2015 annual deer hunter survey, nearly 57% of hunters reported too few deer and only 37% reported that the number of deer in their area was just about right. Fast forward to 2020, and survey results show that only 38% of hunters feel the deer population is too low and almost half (48%) think that there are just about the right number of deer on the landscape.



Similarly, hunters have reported steady increases in various measures of satisfaction related to number of deer seen, overall deer hunting experience, and management of Ohio’s deer herd (Figure 20). In 2015, 40% of hunters claimed they were at least somewhat satisfied with the number of deer seen, 61% were satisfied with their overall deer hunting experience, and 36% had a favorable opinion of the management of Ohio’s deer herd. With apparent growth in the deer population since that time, 2020 survey results show that the proportion of hunters with a favorable opinion of deer numbers jumped to 57%, satisfaction with their deer hunting experience increased to 73%, and 56% of hunters gave the Division of Wildlife a favorable rating regarding the management of Ohio’s deer herd (Table 13).

Figure 19. Proportion of hunters reporting “too few deer” and “just about the right number of deer” on deer hunter surveys, 2015-2020.

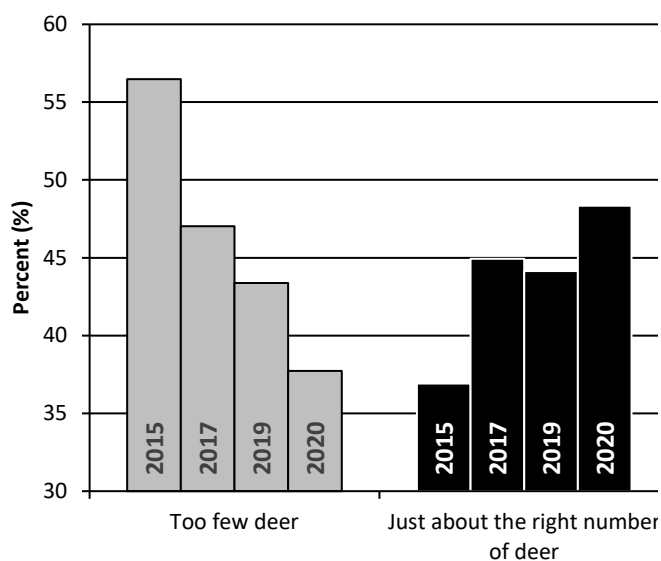


Figure 20. Satisfaction scores of deer hunters, 2015-2020.

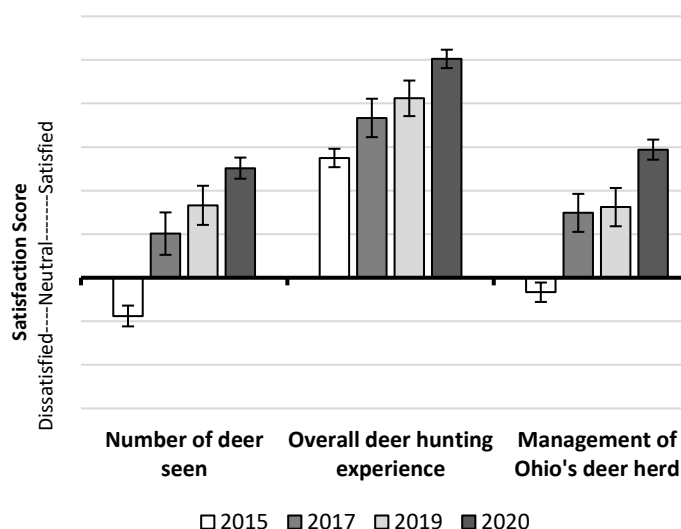


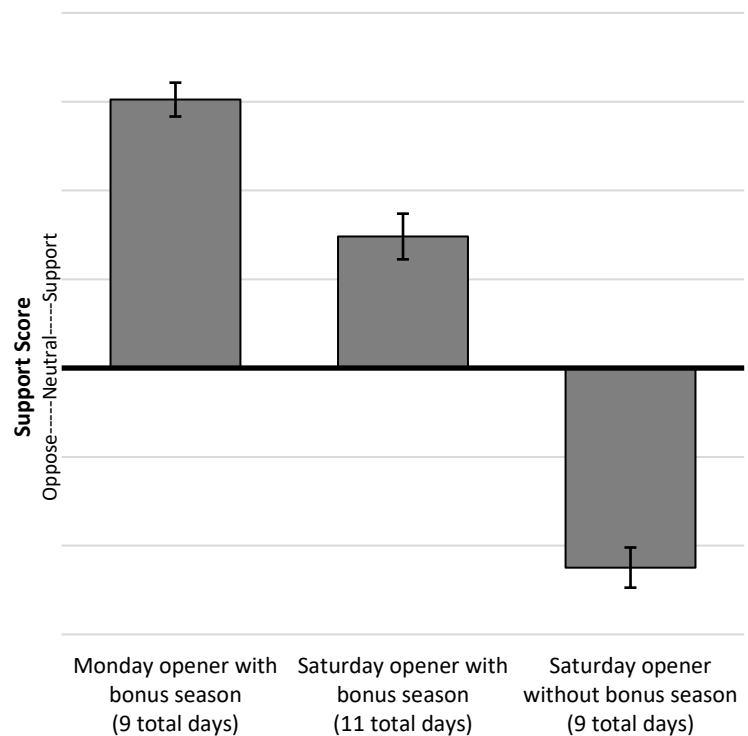
Table 13. Proportion of hunters reporting satisfaction or dissatisfaction with various items related to their deer season according to 2015 and 2020 annual deer hunter surveys.

	% Satisfied or Somewhat Satisfied		% Dissatisfied or Somewhat Dissatisfied	
	2015	2020	2015	2020
Deer numbers	40.1	57.4	51.4	30.7
Overall deer hunting experience	60.9	73.3	24.9	15.6
Management of Ohio’s deer herd	36.4	55.7	38.7	21.7

### Timing and Structure of Gun Seasons

Recent comments from some constituents along with a change in the spring turkey season opener from a Monday to Saturday prompted a survey question to investigate deer hunter attitudes regarding the opening day and structure of deer gun season. We asked survey participants to consider three gun season options: 1) Open on Monday following Thanksgiving and close on Sunday plus 2-day season in mid-December (current structure, 9 total gun days), 2) Open on Saturday following Thanksgiving and close the following Sunday plus 2-day season in mid-December (11 total gun days), and 3) Open on Saturday after Thanksgiving and close the following Sunday without an extra 2-day season (9 total gun days). While both the current structure and the 11-day season received support, the degree of support was greatest for the current season structure (Figure 21).

Figure 21. Average level of support for three gun season options according to participants in the 2020-21 deer hunter survey.



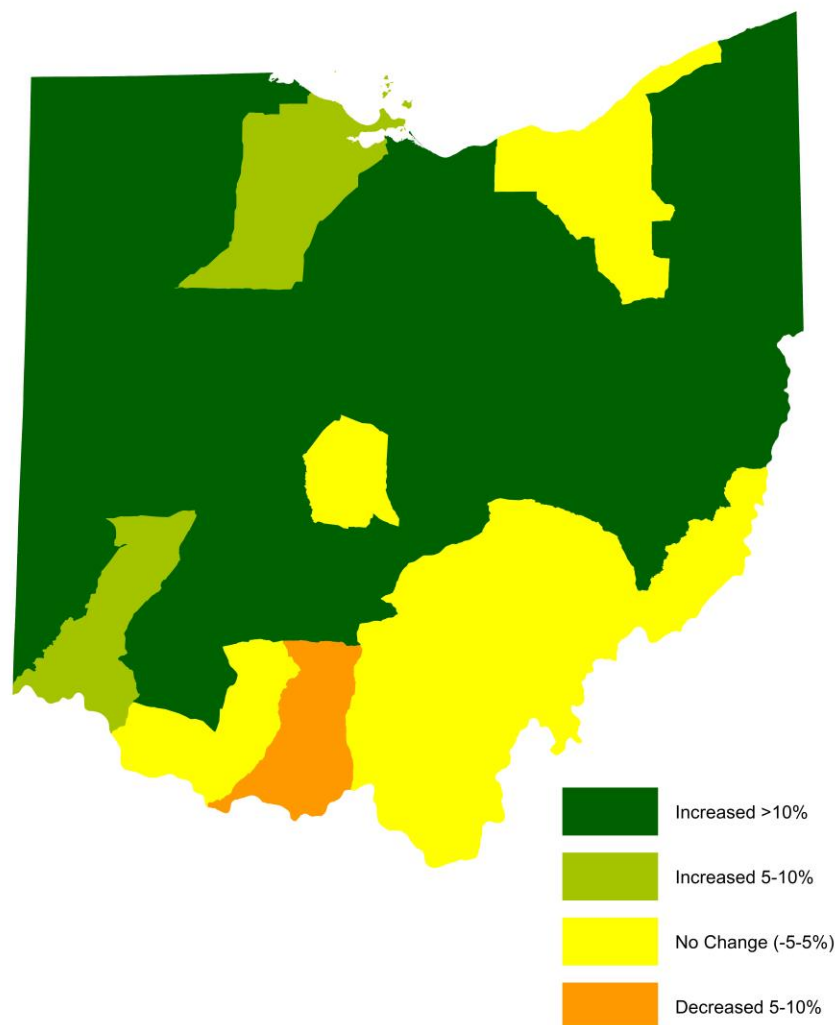
### Annual Bowhunter Survey

The primary purpose of the annual bowhunter survey is to monitor trends in sighting rates of several furbearing species (coyote, bobcat, fox, raccoon, etc.), but it also serves as one of the deer program's most important population monitoring tools. By recording the number of hours spent hunting and the number of animals seen, hunters participating in this survey provide the data necessary to generate a sighting rate (deer observed per hour) that can be used to track populations over time. The bowhunter survey is not influenced by many of the biases that often impact harvest data (most notably hunter selectivity), making the sighting data an extremely important index to population size. Unlike other surveys, the bowhunter survey is open to anyone willing to participate. We offer two versions of the survey, paper and electronic. In 2020, 899 hunters completed the paper version and 1,682 hunters participated in the online survey. In all, these hunters reported spending 93,000 hours on stand and 77,800 deer sightings for a sighting rate of 0.84 deer/hour. While there is a substantial number of participants, it is not quite enough to make management decisions at a county level – there are just too few cooperating hunters in each county. If you would like to take an active role in the management of Ohio's deer herd, we encourage anyone interested in participating in the annual bowhunter survey to contact us by phone at 1-800-WILDLIFE (1-800-945-3543) or via email at [wildinfo@dnr.state.oh.us](mailto:wildinfo@dnr.state.oh.us).

### Periodic Goal-Setting Survey

The third, and arguably most important survey we utilize is a periodic (every 3-5 years) survey of deer hunters and landowners to set population goals (increase, decrease, or stabilize). We conducted goal-setting surveys in 2015 and most recently in the summer of 2019. Participants in each group (farmers and hunters) were asked to answer the same question: *In the area that you hunt/farm, are there too many, too few, or just about the right number of deer?* Results of the 2015 survey suggested room for moderate herd growth across much of the state with 50% of hunters reporting *too few deer* and just 29% of farmers responding *too many deer*. After several seasons of conservative regulations and primary population indices indicating that population growth had occurred in many of these areas, we conducted another goal-setting survey in 2019 to determine the impact of recent herd increases on stakeholder opinions. Nearly 3,000 hunters responded, and, as expected, the proportion reporting *too few deer* declined to 41% and the percent reporting *just about the right number* of deer increased from 40% in 2015 to 50% in 2019. Figure 22 provides a regional view of the changes in hunter opinions from 2015 to 2019, where a large portion of the state (dark green) saw more than a 10% increase in the proportion of hunters reporting about the right number of deer.

Figure 22. Difference in the proportion of hunters reporting about the right number of deer in 2019 compared to 2015. Significant improvements were made in a large portion of the state, while some work remains in the southeastern portion of the state where increases were called for in 2015 but opinions were largely unchanged in 2019.

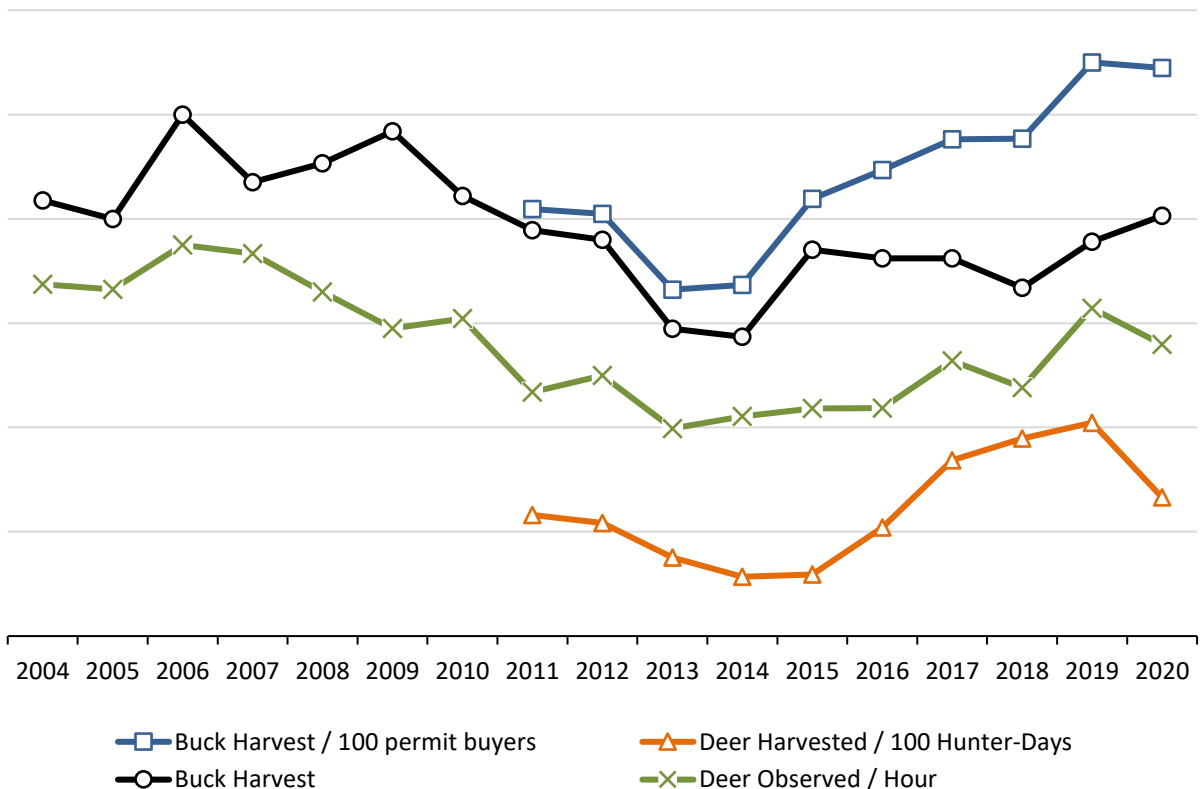


## UNDERSTANDING POPULATION TRENDS

While the Division of Wildlife does not routinely count deer, several trends that reflect changes in the size of the deer population are monitored annually. Some of the trends used include: the number of bucks harvested, carcasses removed from roadways, deer seen per hour, and number of days to harvest a deer. Rather than direct population estimates, each of these measures serve as an index to the size of the population. In other words, they change when the deer population changes. Contrary to popular belief, biologists do not need to know exactly how many deer are on the landscape to properly manage the population. Rather, determining 1) whether the population is stable, increasing, or decreasing, and 2) whether its current trajectory is in agreement with population objectives are key to making harvest management decisions. These indices provide this valuable information.

Though the annual buck harvest has been used as the primary index of deer population size, a host of variables can influence the number of bucks harvested each year. Crop harvest timing, mast availability, and weather on traditionally high harvest days (opening day of gun season) can certainly impact harvest. Using the annual buck harvest as an index to population size also assumes that hunter participation, effort, and selectivity is relatively constant from year to year. Unfortunately, as hunter numbers continue to decline, we have had to develop a buck harvest index that accounts for the annual decline in hunting pressure. Additionally, we rely heavily on annual hunter surveys. In the annual Deer Hunter Effort and Harvest Survey hunters provide information regarding their effort (number of days hunted), harvest, and opinions of the deer population in the area they hunt. Finally, participants in the annual Bowhunter Survey record time spent hunting and number of deer seen on each hunting trip. Collectively these data allow biologists to determine if the population is stable, growing, or declining and, most importantly, determine if trends are consistent with direction provided by the results of population goal setting surveys (see *Periodic Goal-Setting Survey* on page 23). Figure 23 illustrates general consistency in direction for the different indices that are used to monitor population trends.

Figure 23. Statewide deer population trends based on reported buck harvest, buck harvest per permit buyer, deer observed per hour of bowhunting (annual bowhunter survey), and deer harvested per 100 days of hunting effort (annual deer hunter survey), 2004-2020.





# APPENDIX 1

## Historical Permit Sales and Harvest

Year	Counties Open in Gun Season	Permits Sold	Deer Harvested
1900	88	?	?
1901-42	Season closed		
1943	3	8,500	168
1944	3	9,200	117
1945	3	7,700	62
1946	Season closed		
1947	8	9,669	1,000
1948	13	23,044	1,600
1949	Season closed		
1950	19	22,728	3,500
1951	Season closed		
1952	27	14,081	450
1953	40	30,033	4,000
1954	Season closed		
1955	42	36,419	4,200
1956	88	48,263	3,911
1957	88	46,466	4,784
1958	88	42,777	4,415
1959	88	38,414	2,960
1960	88	27,430	2,584
1961	Season closed		
1962	88	23,049	2,114
1963	88	33,298	2,074
1964	88	32,400	1,326
1965	36	12,808	406
1966	48	24,079	1,073
1967	50	28,892	1,437
1968	50	35,322	1,396
1969	56	45,078	2,105
1970	51	54,807	2,387
1971	63	74,758	3,831
1972	63	88,919	5,074
1973	59	107,933	7,594
1974	65	106,867	10,747
1975	68	125,807	14,972
1976	68	138,946	23,431
1977	73	155,445	22,319
1978	74	175,314	22,967
1979	88	193,764	34,874
1980	88	216,055	40,499

Year	Counties Open in Gun Season	Permits Sold	Deer Harvested
1981	88	231,948	47,634
1982	88	257,504	52,885
1983	88	264,493	59,812
1984	88	273,205	66,860
1985	88	277,714	64,263
1986	88	290,293	67,626
1987	88	297,205	79,355
1988	88	373,435	100,674
1989	88	284,909	91,236
1990	88	295,127	98,468
1991	88	338,186	119,215
1992	88	359,250	126,113
1993	88	385,068	138,752
1994	88	425,797	170,527
1995	88	496,890	179,543
1996	88	475,288	158,000
1997	88	439,814	153,159
1998	88	365,875	118,270
1999	88	361,125	126,770
2000	88	438,744	150,432
2001	88	469,055	165,124
2002	88	507,723	204,652
2003	88	515,928	197,790
2004	88	520,458	216,443
2005	88	515,181	209,513
2006	88	543,614	237,316
2007	88	578,366	232,854
2008	88	611,442	252,017
2009	88	624,908	261,260
2010	88	609,417	239,475
2011	88	603,549	219,748
2012	88	588,885	218,910
2013	88	535,676	191,503
2014	88	494,378	175,801
2015	88	466,102	188,335
2016	88	445,166	182,169
2017	88	429,006	186,247
2018	88	399,306	172,049
2019	88	393,367	184,468
2020	88	409,808	197,721

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2020	3-year average	Diff. (%)	2020	3-year average	2020	3-year average	2020	3-year average	Diff. (%)
Adams	Gun	359	392	-8.4	562	527	105	99	1,026	1,018	0.8
	Crossbow	517	473	9.4	355	364	51	56	923	893	3.4
	Longbow	306	308	-0.5	189	224	32	29	527	561	-6.1
	Bonus Gun	74	58	27.6	125	99	12	11	211	168	25.6
	Muzzleloader	52	75	-31.0	94	128	20	17	166	220	-24.5
	Youth	46	73	-37.0	24	30	5	7	75	110	-32.0
	Total	1,360	1,387	-1.9	1,361	1,382	226	221	2,947	2,989	-1.4
Allen	Gun	143	126	13.2	209	153	50	38	402	317	26.8
	Crossbow	170	166	2.4	136	136	55	32	361	334	8.2
	Longbow	61	86	-28.8	63	69	14	15	138	170	-18.8
	Bonus Gun	27	25	9.5	34	41	13	9	74	75	-1.3
	Muzzleloader	10	17	-41.2	25	30	4	7	39	54	-27.8
	Youth	18	17	3.8	18	10	9	4	45	32	40.6
	Total	437	442	-1.2	491	443	147	106	1,075	992	8.4
Ashland	Gun	498	424	17.5	836	656	202	171	1,536	1,251	22.8
	Crossbow	518	423	22.5	446	358	100	78	1,064	859	23.8
	Longbow	189	194	-2.4	229	213	25	22	443	428	3.4
	Bonus Gun	84	76	10.0	205	164	40	36	329	276	19.2
	Muzzleloader	48	61	-21.7	112	135	35	30	195	227	-14.0
	Youth	40	61	-34.4	38	51	10	13	88	124	-29.2
	Total	1,384	1,248	10.9	1,895	1,592	418	355	3,697	3,195	15.7
Ashtabula	Gun	632	602	4.9	1,200	1,086	335	318	2,167	2,006	8.0
	Crossbow	815	611	33.3	785	665	234	183	1,834	1,459	25.7
	Longbow	247	223	10.8	326	289	79	73	652	585	11.5
	Bonus Gun	135	121	11.3	344	267	89	72	568	460	23.6
	Muzzleloader	52	68	-23.2	144	167	42	50	238	284	-16.2
	Youth	41	57	-27.6	55	53	19	19	115	129	-10.6
	Total	1,946	1,695	14.8	2,904	2,551	812	724	5,662	4,970	13.9
Athens	Gun	463	551	-16.0	670	729	122	111	1,255	1,391	-9.8
	Crossbow	491	497	-1.2	321	294	41	38	853	829	2.9
	Longbow	315	355	-11.2	177	248	22	24	514	627	-18.0
	Bonus Gun	88	70	26.3	141	119	17	15	246	203	21.0
	Muzzleloader	70	106	-34.2	119	194	12	26	201	326	-38.4
	Youth	51	71	-27.8	27	33	7	10	85	113	-25.0
	Total	1,489	1,659	-10.2	1,470	1,624	225	228	3,184	3,511	-9.3

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### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2020	3-year average	Diff. (%)	2020	3-year average	2020	3-year average	2020	3-year average	Diff. (%)
Auglaize	Gun	127	125	1.3	193	142	66	47	386	314	23.1
	Crossbow	155	129	20.2	131	114	39	32	325	274	18.5
	Longbow	64	64	0.5	56	56	17	10	137	130	5.4
	Bonus Gun	27	23	17.4	40	34	6	7	73	64	14.1
	Muzzleloader	12	16	-26.5	18	31	4	7	34	54	-37.4
	Youth	19	15	29.5	19	12	9	5	47	32	48.4
	Total	404	376	7.4	460	393	142	108	1,006	877	14.7
Belmont	Gun	518	480	8.0	622	587	99	103	1,239	1,169	6.0
	Crossbow	532	425	25.3	223	230	44	27	799	681	17.3
	Longbow	186	196	-5.1	106	128	9	12	301	336	-10.4
	Bonus Gun	82	74	10.8	136	129	26	18	244	222	10.1
	Muzzleloader	86	84	2.0	121	155	16	29	223	268	-16.9
	Youth	64	80	-20.3	29	40	9	10	102	130	-21.5
	Total	1,478	1,348	9.7	1,251	1,280	203	200	2,932	2,827	3.7
Brown	Gun	337	304	10.9	558	472	107	78	1,002	855	17.2
	Crossbow	424	312	36.0	346	281	55	40	825	633	30.3
	Longbow	192	227	-15.4	191	197	23	23	406	447	-9.2
	Bonus Gun	41	46	-11.5	117	92	21	17	179	156	14.7
	Muzzleloader	53	53	-0.6	110	114	15	21	178	189	-5.8
	Youth	39	38	1.7	19	25	4	6	62	70	-11.4
	Total	1,098	990	10.9	1,358	1,190	227	188	2,683	2,369	13.3
Butler	Gun	152	133	14.6	219	135	40	30	411	297	38.2
	Crossbow	319	281	13.7	317	237	48	45	684	563	21.6
	Longbow	129	159	-18.7	138	128	26	26	293	313	-6.3
	Bonus Gun	30	24	23.3	65	39	6	8	101	71	42.9
	Muzzleloader	25	30	-16.7	44	50	10	11	79	91	-13.2
	Youth	19	16	16.3	11	9	8	3	38	28	35.7
	Total	680	647	5.1	799	605	138	123	1,617	1,375	17.6
Carroll	Gun	518	542	-4.4	960	827	186	183	1,664	1,551	7.3
	Crossbow	580	497	16.8	498	380	79	65	1,157	941	22.9
	Longbow	236	223	5.8	203	186	29	26	468	436	7.4
	Bonus Gun	113	90	25.1	251	208	50	38	414	336	23.1
	Muzzleloader	64	89	-28.1	164	202	21	34	249	325	-23.4
	Youth	63	64	-2.1	45	41	9	16	117	121	-3.6
	Total	1,593	1,516	5.1	2,148	1,867	382	364	4,123	3,748	10.0

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### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2020	3-year average	Diff. (%)	2020	3-year average	2020	3-year average	2020	3-year average	Diff. (%)
Champaign	Gun	176	162	8.6	235	186	57	33	468	381	22.9
	Crossbow	203	188	7.8	194	153	32	32	429	373	15.0
	Longbow	144	121	19.0	110	98	8	19	262	239	9.8
	Bonus Gun	32	27	20.0	58	47	15	4	105	78	34.6
	Muzzleloader	20	24	-16.7	56	44	13	7	89	75	18.7
	Youth	19	22	-12.3	9	13	1	4	29	39	-26.3
	Total	599	548	9.3	671	542	127	102	1,397	1,192	17.2
Clark	Gun	96	81	19.0	101	85	21	19	218	185	17.6
	Crossbow	170	150	13.3	118	107	23	17	311	274	13.6
	Longbow	79	73	8.2	58	74	7	9	144	156	-7.9
	Bonus Gun	17	18	-5.6	32	20	5	2	54	40	33.9
	Muzzleloader	11	19	-41.1	18	23	3	5	32	47	-32.4
	Youth	9	13	-32.5	3	3	0	3	12	20	-39.0
	Total	386	356	8.3	339	316	60	57	785	730	7.5
Clermont	Gun	270	243	11.0	448	313	89	60	807	616	30.9
	Crossbow	430	415	3.6	508	397	84	76	1,022	888	15.1
	Longbow	244	239	1.9	262	274	46	31	552	544	1.5
	Bonus Gun	54	39	38.5	87	80	23	14	164	132	23.9
	Muzzleloader	27	48	-44.1	77	81	16	12	120	141	-14.7
	Youth	27	31	-12.9	9	18	6	6	42	55	-23.6
	Total	1,055	1,024	3.1	1,397	1,170	265	199	2,717	2,393	13.6
Clinton	Gun	111	101	10.3	82	117	24	30	217	248	-12.5
	Crossbow	146	111	31.1	57	85	18	17	221	213	3.6
	Longbow	62	71	-12.3	24	69	7	9	93	149	-37.4
	Bonus Gun	19	20	-6.6	22	29	6	5	47	54	-12.4
	Muzzleloader	15	16	-6.3	15	34	3	8	33	58	-43.4
	Youth	16	17	-7.7	10	8	6	5	32	30	5.5
	Total	371	339	9.3	213	345	64	77	648	761	-14.9
Columbiana	Gun	507	448	13.3	665	609	170	157	1,342	1,214	10.6
	Crossbow	547	446	22.6	385	331	82	74	1,014	851	19.2
	Longbow	240	182	32.1	141	144	25	31	406	357	13.6
	Bonus Gun	94	91	3.3	216	153	54	37	364	281	29.5
	Muzzleloader	44	65	-32.3	103	146	22	29	169	240	-29.7
	Youth	61	46	31.7	40	35	15	15	116	97	20.0
	Total	1,509	1,288	17.2	1,568	1,440	376	347	3,453	3,075	12.3

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### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2020	3-year average	Diff. (%)	2020	3-year average	2020	3-year average	2020	3-year average	Diff. (%)
Coshocton	Gun	678	775	-12.6	1,356	1,310	247	268	2,281	2,353	-3.1
	Crossbow	1,113	942	18.2	980	818	164	126	2,257	1,886	19.7
	Longbow	493	514	-4.1	493	441	51	64	1,037	1,019	1.8
	Bonus Gun	115	105	9.9	350	245	52	50	517	399	29.5
	Muzzleloader	92	129	-28.9	236	284	39	42	367	455	-19.3
	Youth	121	126	-3.7	88	102	30	30	239	258	-7.2
	Total	2,644	2,613	1.2	3,555	3,240	592	585	6,791	6,438	5.5
Crawford	Gun	249	231	7.6	320	260	77	65	646	556	16.1
	Crossbow	205	148	38.5	146	128	40	23	391	299	30.6
	Longbow	70	68	2.9	66	55	3	7	139	130	6.9
	Bonus Gun	35	25	40.0	48	56	11	14	94	95	-0.7
	Muzzleloader	17	16	4.1	24	43	5	8	46	68	-32.4
	Youth	23	20	15.0	11	15	9	6	43	41	4.9
	Total	601	513	17.1	617	560	145	127	1,363	1,200	13.6
Cuyahoga	Gun	16	17	-5.9	22	26	7	4	45	47	-3.6
	Crossbow	231	193	19.7	390	376	69	60	690	628	9.8
	Longbow	86	70	23.4	149	177	17	25	252	272	-7.4
	Bonus Gun	2	1	100.0	2	2	1	1	5	4	36.4
	Muzzleloader	2	1	200.0	1	1	0	1	3	2	28.6
	Youth	0	1	-100	0	0	0	0	0	1	-100.0
	Total	338	283	19.6	565	581	94	91	997	955	4.4
Darke	Gun	150	103	45.6	161	119	51	34	362	256	41.4
	Crossbow	123	101	21.4	125	95	25	21	273	218	25.4
	Longbow	59	65	-9.2	61	52	14	11	134	128	5.0
	Bonus Gun	13	21	-37.1	28	30	10	9	51	59	-13.6
	Muzzleloader	12	14	-14.3	11	25	3	3	26	42	-38.6
	Youth	15	15	-2.2	7	13	5	3	27	31	-12.0
	Total	376	322	16.6	399	337	108	83	883	742	18.9
Defiance	Gun	329	282	16.5	524	317	131	98	984	698	41.0
	Crossbow	254	206	23.1	302	167	74	37	630	410	53.5
	Longbow	105	86	22.6	112	87	14	12	231	184	25.5
	Bonus Gun	50	54	-8.0	96	90	27	24	173	168	2.8
	Muzzleloader	28	32	-12.5	41	57	13	15	82	104	-21.4
	Youth	43	34	27.7	44	24	12	8	99	65	51.5
	Total	819	703	16.6	1,133	751	276	196	2,228	1,650	35.0



## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2020	3-year average	Diff. (%)	2020	3-year average	2020	3-year average	2020	3-year average	Diff. (%)
Delaware	Gun	160	165	-3.0	213	206	37	42	410	413	-0.7
	Crossbow	344	257	34.0	260	231	49	48	653	536	21.8
	Longbow	214	166	29.2	159	175	24	29	397	370	7.4
	Bonus Gun	30	26	15.4	41	41	11	10	82	77	7.0
	Muzzleloader	25	21	19.0	29	35	11	10	65	66	-2.0
	Youth	10	14	-28.6	6	8	2	4	18	25	-28.9
	Total	788	654	20.4	718	700	135	146	1,641	1,500	9.4
Erie	Gun	140	92	51.6	171	114	41	27	352	234	50.6
	Crossbow	215	173	24.5	163	139	38	32	416	344	20.9
	Longbow	50	52	-3.2	46	53	11	10	107	114	-6.4
	Bonus Gun	21	18	14.5	22	34	13	7	56	60	-6.7
	Muzzleloader	13	13	2.6	23	21	5	6	41	40	1.7
	Youth	9	24	-62.5	4	26	3	8	16	58	-72.6
	Total	453	432	4.9	430	501	113	132	996	1,065	-6.4
Fairfield	Gun	287	265	8.3	439	321	97	77	823	664	24.0
	Crossbow	329	280	17.5	279	205	62	41	670	526	27.5
	Longbow	208	175	18.6	147	157	14	19	369	351	5.1
	Bonus Gun	46	37	25.5	96	75	21	13	163	125	30.7
	Muzzleloader	24	42	-42.9	49	78	11	16	84	136	-38.2
	Youth	32	29	11.6	17	20	3	6	52	55	-4.9
	Total	934	833	12.2	1,035	866	209	174	2,178	1,873	16.3
Fayette	Gun	75	59	26.4	44	56	9	8	128	123	3.8
	Crossbow	72	49	45.9	16	30	5	6	93	85	9.0
	Longbow	44	33	33.3	11	16	1	5	56	54	3.7
	Bonus Gun	11	8	37.5	7	12	1	2	19	21	-10.9
	Muzzleloader	4	12	-67.6	8	12	2	3	14	27	-48.1
	Youth	12	9	33.3	2	3	1	1	15	13	15.4
	Total	219	173	26.6	90	129	19	25	328	327	0.3
Franklin	Gun	84	60	40.8	77	60	23	17	184	137	34.6
	Crossbow	197	165	19.6	177	144	46	25	420	334	25.6
	Longbow	119	95	25.3	91	92	15	14	225	201	11.8
	Bonus Gun	13	7	95.0	19	18	4	2	36	27	31.7
	Muzzleloader	8	11	-27.3	11	21	2	4	21	37	-42.7
	Youth	7	6	23.5	4	2	0	2	11	10	13.8
	Total	431	345	24.9	380	342	90	65	901	752	19.8

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2020	3-year average	Diff. (%)	2020	3-year average	2020	3-year average	2020	3-year average	Diff. (%)
Fulton	Gun	158	138	14.5	190	133	45	36	393	307	28.0
	Crossbow	150	111	35.5	106	76	30	20	286	207	38.4
	Longbow	56	56	0.0	57	43	8	12	121	111	8.7
	Bonus Gun	20	22	-7.7	30	28	3	5	53	55	-3.0
	Muzzleloader	6	14	-58.1	11	22	5	5	22	41	-46.3
	Youth	17	10	75.9	15	7	7	4	39	20	91.8
	Total	409	353	15.8	417	314	98	82	924	749	23.4
Gallia	Gun	357	436	-18.1	555	609	103	102	1,015	1,148	-11.6
	Crossbow	400	322	24.2	244	211	34	33	678	566	19.9
	Longbow	190	175	8.4	84	113	14	11	288	299	-3.8
	Bonus Gun	56	46	21.7	117	79	14	15	187	141	32.9
	Muzzleloader	52	57	-8.2	89	94	13	15	154	165	-6.7
	Youth	50	50	0.0	38	31	11	9	99	89	10.8
	Total	1,112	1,094	1.7	1,137	1,145	189	187	2,438	2,426	0.5
Geauga	Gun	230	206	11.5	282	266	83	76	595	549	8.4
	Crossbow	408	300	36.0	401	310	91	91	900	701	28.4
	Longbow	158	133	18.8	189	166	55	50	402	349	15.2
	Bonus Gun	53	36	45.9	98	65	38	16	189	118	60.6
	Muzzleloader	16	26	-39.2	56	49	19	13	91	89	2.2
	Youth	15	15	2.3	7	19	10	6	32	40	-20.7
	Total	890	723	23.0	1,041	884	298	255	2,229	1,863	19.6
Greene	Gun	106	92	15.2	123	109	35	17	264	218	21.1
	Crossbow	204	144	42.0	129	120	30	18	363	281	29.0
	Longbow	103	92	12.4	74	76	9	12	186	180	3.3
	Bonus Gun	20	18	13.2	44	31	10	3	74	52	43.2
	Muzzleloader	12	19	-35.7	20	26	9	5	41	49	-16.9
	Youth	14	14	-2.3	8	6	1	1	23	22	6.2
	Total	463	379	22.2	403	371	94	58	960	808	18.8
Guernsey	Gun	582	672	-13.3	1,114	954	194	196	1,890	1,822	3.7
	Crossbow	773	680	13.6	588	491	104	90	1,465	1,261	16.2
	Longbow	287	303	-5.3	254	241	27	36	568	580	-2.1
	Bonus Gun	118	80	46.9	245	156	49	32	412	268	53.7
	Muzzleloader	76	107	-29.0	168	252	35	38	279	397	-29.7
	Youth	65	80	-19.1	57	56	26	19	148	156	-4.9
	Total	1,920	1,937	-0.9	2,449	2,169	440	416	4,809	4,522	6.4

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2020	3-year average	Diff. (%)	2020	3-year average	2020	3-year average	2020	3-year average	Diff. (%)
Hamilton	Gun	69	65	6.7	92	75	17	17	178	157	13.1
	Crossbow	269	321	-16.2	414	407	111	79	794	807	-1.6
	Longbow	148	196	-24.5	265	277	37	50	450	523	-14.0
	Bonus Gun	12	11	9.1	28	23	5	2	45	37	22.7
	Muzzleloader	6	12	-48.6	8	20	3	5	17	37	-53.6
	Youth	3	6	-47.1	3	4	1	0	7	10	-30.0
	Total	510	612	-16.7	813	808	174	155	1,497	1,575	-5.0
Hancock	Gun	259	209	24.1	320	203	88	60	667	472	41.2
	Crossbow	239	184	30.1	209	134	49	27	497	345	44.2
	Longbow	124	119	3.9	103	93	23	13	250	225	10.9
	Bonus Gun	39	38	1.7	50	47	11	12	100	97	3.4
	Muzzleloader	15	20	-26.2	30	36	7	8	52	64	-18.8
	Youth	37	21	73.4	22	14	9	4	68	39	74.4
	Total	722	598	20.8	742	529	190	125	1,654	1,252	32.1
Hardin	Gun	235	176	33.8	340	252	90	59	665	486	36.7
	Crossbow	166	135	22.7	160	138	46	34	372	308	20.9
	Longbow	106	97	9.3	95	103	21	22	222	223	-0.3
	Bonus Gun	38	44	-13.6	54	62	17	16	109	122	-10.7
	Muzzleloader	23	27	-14.8	36	59	12	13	71	99	-28.3
	Youth	22	23	-4.3	17	12	11	8	50	43	16.3
	Total	597	506	17.9	712	631	198	153	1,507	1,291	16.8
Harrison	Gun	492	494	-0.5	777	756	147	157	1,416	1,407	0.7
	Crossbow	628	496	26.5	345	361	53	53	1,026	910	12.7
	Longbow	251	231	8.5	197	200	22	19	470	450	4.4
	Bonus Gun	106	68	56.7	213	161	40	31	359	259	38.6
	Muzzleloader	65	89	-27.0	124	189	26	32	215	310	-30.6
	Youth	69	65	6.2	52	44	12	14	133	123	8.4
	Total	1,615	1,454	11.0	1,731	1,726	301	309	3,647	3,489	4.5
Henry	Gun	176	148	19.2	188	149	51	40	415	336	23.5
	Crossbow	106	93	13.6	98	56	27	17	231	166	39.2
	Longbow	67	51	32.2	53	40	5	9	125	99	25.8
	Bonus Gun	22	32	-30.5	26	26	2	8	50	66	-23.9
	Muzzleloader	10	10	-3.2	9	19	4	3	23	32	-28.9
	Youth	15	10	55.2	25	11	6	2	46	22	106.0
	Total	405	346	16.9	410	304	95	80	910	730	24.6

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2020	3-year average	Diff. (%)	2020	3-year average	2020	3-year average	2020	3-year average	Diff. (%)
Highland	Gun	390	313	24.6	613	492	151	100	1,154	905	27.6
	Crossbow	374	333	12.2	372	286	62	67	808	687	17.7
	Longbow	215	193	11.6	186	200	27	30	428	423	1.2
	Bonus Gun	52	54	-3.7	127	103	32	20	211	177	19.2
	Muzzleloader	52	64	-18.3	101	110	26	18	179	192	-6.6
	Youth	62	56	10.1	34	35	15	9	111	101	9.9
	Total	1,150	1,019	12.8	1,445	1,237	315	247	2,910	2,503	16.3
Hocking	Gun	403	476	-15.4	563	635	113	115	1,079	1,226	-12.0
	Crossbow	437	480	-8.9	296	312	41	47	774	839	-7.7
	Longbow	213	279	-23.7	148	183	13	21	374	483	-22.6
	Bonus Gun	68	55	22.9	116	93	24	15	208	163	27.3
	Muzzleloader	47	95	-50.4	75	162	13	26	135	282	-52.2
	Youth	25	50	-50.0	18	25	5	7	48	82	-41.5
	Total	1,200	1,444	-16.9	1,224	1,418	209	231	2,633	3,093	-14.9
Holmes	Gun	484	480	0.9	976	800	188	168	1,648	1,448	13.8
	Crossbow	740	599	23.5	689	557	137	102	1,566	1,258	24.5
	Longbow	301	259	16.1	394	346	43	41	738	647	14.1
	Bonus Gun	92	79	16.5	212	192	45	37	349	307	13.6
	Muzzleloader	59	65	-8.8	158	181	26	36	243	282	-13.7
	Youth	107	97	10.7	90	74	26	20	223	191	16.8
	Total	1,799	1,593	12.9	2,561	2,170	473	414	4,833	4,177	15.7
Huron	Gun	375	352	6.6	621	502	184	143	1,180	997	18.4
	Crossbow	338	268	26.0	255	217	57	45	650	530	22.7
	Longbow	146	134	9.0	141	122	25	21	312	276	12.9
	Bonus Gun	57	57	-0.6	133	123	31	33	221	213	3.8
	Muzzleloader	26	34	-23.5	63	73	16	24	105	131	-20.1
	Youth	35	37	-5.4	41	29	9	15	85	81	4.9
	Total	980	891	10.0	1,276	1,081	323	284	2,579	2,256	14.3
Jackson	Gun	318	394	-19.3	524	593	96	110	938	1,098	-14.5
	Crossbow	473	434	8.9	319	317	42	48	834	800	4.3
	Longbow	234	266	-12.0	153	181	19	19	406	466	-12.9
	Bonus Gun	44	54	-18.0	111	111	14	15	169	180	-5.9
	Muzzleloader	46	68	-32.4	95	132	13	22	154	222	-30.7
	Youth	53	57	-7.6	25	32	6	10	84	99	-15.4
	Total	1,169	1,279	-8.6	1,236	1,374	190	228	2,595	2,881	-9.9

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2020	3-year average	Diff. (%)	2020	3-year average	2020	3-year average	2020	3-year average	Diff. (%)
Jefferson	Gun	394	342	15.2	397	368	82	62	873	772	13.0
	Crossbow	418	293	42.5	164	144	30	19	612	456	34.1
	Longbow	210	158	33.2	75	94	7	11	292	262	11.5
	Bonus Gun	81	48	67.6	122	79	15	21	218	148	47.3
	Muzzleloader	53	54	-1.2	67	90	16	16	136	160	-14.8
	Youth	48	44	8.3	22	23	3	6	73	74	-0.9
	Total	1,222	946	29.1	854	804	153	136	2,229	1,886	18.2
Knox	Gun	648	602	7.7	1,132	920	226	226	2,006	1,748	14.8
	Crossbow	706	580	21.7	680	540	129	97	1,515	1,217	24.5
	Longbow	386	325	18.6	381	343	50	45	817	714	14.4
	Bonus Gun	114	90	27.1	272	194	51	44	437	328	33.1
	Muzzleloader	68	83	-17.7	161	203	27	45	256	331	-22.6
	Youth	79	89	-11.6	61	60	28	21	168	170	-1.4
	Total	2,016	1,787	12.8	2,715	2,282	516	484	5,247	4,554	15.2
Lake	Gun	67	53	27.2	96	92	34	20	197	164	19.9
	Crossbow	221	182	21.7	289	234	76	53	586	469	24.9
	Longbow	61	47	28.9	90	73	17	14	168	135	24.8
	Bonus Gun	18	11	63.6	28	23	6	4	52	38	36.8
	Muzzleloader	5	8	-37.5	19	15	3	2	27	25	8.0
	Youth	8	4	100.0	4	3	1	1	13	8	56.0
	Total	382	306	24.8	526	442	138	95	1,046	844	24.0
Lawrence	Gun	291	335	-13.0	302	408	46	57	639	800	-20.1
	Crossbow	338	246	37.6	142	120	24	20	504	386	30.7
	Longbow	181	184	-1.5	66	83	9	9	256	276	-7.2
	Bonus Gun	60	34	74.8	65	45	6	7	131	86	51.7
	Muzzleloader	43	31	38.7	49	61	8	6	100	97	2.7
	Youth	36	36	-0.9	14	21	3	3	53	60	-11.7
	Total	954	869	9.8	644	742	97	102	1,695	1,713	-1.0
Licking	Gun	608	575	5.7	1,031	830	236	170	1,875	1,575	19.0
	Crossbow	998	812	22.9	761	655	141	116	1,900	1,583	20.1
	Longbow	449	400	12.3	430	373	33	43	912	816	11.8
	Bonus Gun	112	86	29.7	281	177	39	35	432	299	44.6
	Muzzleloader	85	110	-22.7	182	219	23	38	290	367	-20.9
	Youth	55	73	-25.0	36	51	11	17	102	141	-27.7
	Total	2,318	2,075	11.7	2,746	2,324	485	421	5,549	4,820	15.1



## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2020	3-year average	Diff. (%)	2020	3-year average	2020	3-year average	2020	3-year average	Diff. (%)
Logan	Gun	270	254	6.4	456	354	95	80	821	688	19.4
	Crossbow	306	260	17.5	313	276	66	67	685	603	13.5
	Longbow	165	162	1.9	181	190	33	29	379	382	-0.7
	Bonus Gun	38	54	-30.1	77	93	23	17	138	164	-16.0
	Muzzleloader	31	36	-13.1	60	81	14	15	105	132	-20.5
	Youth	38	35	7.5	19	26	8	9	65	70	-7.1
	Total	857	808	6.1	1,123	1,027	242	219	2,222	2,054	8.2
Lorain	Gun	273	230	18.7	371	313	101	87	745	630	18.2
	Crossbow	531	387	37.1	409	354	104	84	1,044	826	26.4
	Longbow	168	125	34.8	168	168	27	33	363	325	11.7
	Bonus Gun	56	53	6.3	98	102	21	20	175	175	0.0
	Muzzleloader	22	33	-32.7	70	76	13	18	105	127	-17.1
	Youth	25	26	-3.8	16	21	13	6	54	53	1.3
	Total	1,082	857	26.3	1,149	1,045	282	252	2,513	2,154	16.7
Lucas	Gun	72	40	81.5	67	54	14	23	153	117	30.8
	Crossbow	187	154	21.4	230	192	59	56	476	402	18.5
	Longbow	62	65	-4.1	76	94	24	17	162	175	-7.6
	Bonus Gun	7	9	-22.2	6	11	0	1	13	21	-38.1
	Muzzleloader	1	6	-83.3	7	14	2	2	10	21	-53.1
	Youth	4	3	33.3	6	3	0	2	10	8	30.4
	Total	336	278	20.7	394	370	101	101	831	749	10.9
Madison	Gun	74	76	-2.6	114	75	14	15	202	165	22.2
	Crossbow	117	79	47.5	73	52	21	11	211	142	48.9
	Longbow	53	62	-15.0	44	43	5	3	102	109	-6.1
	Bonus Gun	19	15	29.5	25	25	6	5	50	44	12.8
	Muzzleloader	9	11	-18.2	20	17	4	3	33	31	7.6
	Youth	11	11	-2.9	8	6	0	3	19	20	-5.0
	Total	285	257	10.8	287	219	50	39	622	515	20.7
Mahoning	Gun	196	230	-14.8	309	275	99	80	604	585	3.2
	Crossbow	394	368	7.0	356	311	107	85	857	764	12.1
	Longbow	112	125	-10.6	105	119	30	22	247	266	-7.1
	Bonus Gun	46	45	2.2	102	76	30	23	178	144	23.6
	Muzzleloader	18	33	-44.9	56	70	16	19	90	121	-25.8
	Youth	16	23	-29.4	6	13	7	6	29	41	-29.8
	Total	793	828	-4.3	940	872	295	237	2,028	1,938	4.7

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2020	3-year average	Diff. (%)	2020	3-year average	2020	3-year average	2020	3-year average	Diff. (%)
Marion	Gun	178	166	7.4	194	173	56	43	428	382	11.9
	Crossbow	146	101	44.1	111	87	15	17	272	205	32.7
	Longbow	80	61	30.4	60	50	12	9	152	121	26.0
	Bonus Gun	34	26	32.5	37	43	12	6	83	74	11.7
	Muzzleloader	9	21	-56.5	15	29	5	2	29	52	-43.9
	Youth	22	17	29.4	10	7	5	2	37	26	42.3
	Total	473	397	19.1	431	391	105	80	1,009	869	16.2
Medina	Gun	291	234	24.2	392	276	92	87	775	598	29.6
	Crossbow	467	372	25.5	498	342	127	86	1,092	800	36.6
	Longbow	173	161	7.7	226	148	37	26	436	335	30.3
	Bonus Gun	39	49	-20.4	105	80	25	21	169	150	12.7
	Muzzleloader	38	41	-8.1	78	76	16	13	132	130	1.5
	Youth	43	22	95.5	16	12	11	6	70	40	75.0
	Total	1,065	890	19.7	1,338	947	311	241	2,714	2,078	30.6
Meigs	Gun	382	461	-17.1	652	642	99	107	1,133	1,210	-6.3
	Crossbow	557	467	19.3	355	285	36	26	948	778	21.9
	Longbow	266	227	17.2	168	166	18	13	452	406	11.3
	Bonus Gun	86	59	46.6	167	115	21	16	274	189	44.7
	Muzzleloader	76	93	-18.6	169	190	15	26	260	309	-15.9
	Youth	50	76	-34.2	40	38	9	9	99	123	-19.5
	Total	1,425	1,389	2.6	1,561	1,445	200	199	3,186	3,032	5.1
Mercer	Gun	142	113	26.0	171	123	51	44	364	280	30.0
	Crossbow	107	89	19.8	112	90	44	26	263	206	27.9
	Longbow	54	45	20.9	60	50	10	13	124	108	15.2
	Bonus Gun	20	20	0.0	26	26	10	11	56	57	-2.3
	Muzzleloader	9	13	-32.5	17	18	5	4	31	36	-13.9
	Youth	15	11	32.4	11	11	11	5	37	28	33.7
	Total	349	294	18.7	397	322	134	105	880	721	22.0
Miami	Gun	104	91	13.9	114	99	35	23	253	213	18.6
	Crossbow	183	154	18.8	126	128	49	27	358	309	15.9
	Longbow	71	74	-3.6	53	62	9	17	133	153	-13.3
	Bonus Gun	18	17	3.8	36	26	1	8	55	52	6.5
	Muzzleloader	7	9	-25.0	16	26	2	3	25	39	-35.9
	Youth	8	15	-45.5	10	6	0	3	18	24	-26.0
	Total	391	363	7.6	357	354	97	83	845	800	5.6

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2020	3-year average	Diff. (%)	2020	3-year average	2020	3-year average	2020	3-year average	Diff. (%)
Monroe	Gun	405	466	-13.2	591	591	118	107	1,114	1,164	-4.3
	Crossbow	433	369	17.3	238	189	37	22	708	581	21.9
	Longbow	129	127	1.3	54	76	6	9	189	213	-11.1
	Bonus Gun	58	52	12.3	123	108	14	15	195	174	12.1
	Muzzleloader	46	67	-31.3	115	139	13	16	174	222	-21.5
	Youth	63	47	34.0	26	31	9	9	98	87	12.2
	Total	1,140	1,135	0.4	1,156	1,141	198	179	2,494	2,456	1.6
Montgomery	Gun	79	64	22.8	95	55	27	19	201	139	45.0
	Crossbow	183	153	19.6	179	135	41	37	403	325	24.0
	Longbow	67	63	6.9	96	95	26	25	189	182	3.8
	Bonus Gun	13	13	-2.5	24	17	6	3	43	34	27.7
	Muzzleloader	9	9	-3.6	16	18	1	1	26	29	-9.3
	Youth	5	6	-11.8	5	5	3	1	13	11	18.2
	Total	360	311	15.8	418	327	104	86	882	724	21.8
Morgan	Gun	412	453	-9.1	751	715	150	131	1,313	1,299	1.1
	Crossbow	444	411	7.9	293	263	51	43	788	717	9.9
	Longbow	256	257	-0.3	144	147	16	17	416	421	-1.3
	Bonus Gun	67	47	41.5	151	95	22	15	240	157	52.5
	Muzzleloader	59	100	-40.8	127	173	15	19	201	292	-31.2
	Youth	75	66	14.2	35	31	8	8	118	105	12.7
	Total	1,329	1,354	-1.9	1,532	1,445	269	241	3,130	3,040	2.9
Morrow	Gun	279	236	18.1	365	267	109	83	753	587	28.4
	Crossbow	327	239	37.0	224	173	56	39	607	450	34.8
	Longbow	127	116	9.2	96	84	14	20	237	220	7.6
	Bonus Gun	42	35	21.2	65	66	14	14	121	115	5.5
	Muzzleloader	23	29	-20.7	37	63	13	15	73	107	-31.8
	Youth	26	29	-11.4	26	10	3	6	55	45	21.3
	Total	827	691	19.7	821	669	212	179	1,860	1,539	20.9
Muskingum	Gun	683	706	-3.2	1,163	1,134	239	230	2,085	2,070	0.7
	Crossbow	908	694	30.8	552	451	77	75	1,537	1,220	25.9
	Longbow	444	416	6.6	248	288	27	31	719	735	-2.2
	Bonus Gun	114	80	41.9	206	183	34	28	354	291	21.8
	Muzzleloader	84	125	-33.0	152	255	27	43	263	423	-37.8
	Youth	82	87	-5.4	76	69	14	11	172	167	3.0
	Total	2,328	2,122	9.7	2,423	2,407	420	421	5,171	4,950	4.5

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2020	3-year average	Diff. (%)	2020	3-year average	2020	3-year average	2020	3-year average	Diff. (%)
Noble	Gun	419	469	-10.6	712	679	156	124	1,287	1,272	1.2
	Crossbow	563	466	20.8	371	280	61	51	995	796	24.9
	Longbow	191	192	-0.7	148	129	13	22	352	343	2.5
	Bonus Gun	71	42	67.7	157	110	17	22	245	175	40.0
	Muzzleloader	53	72	-26.0	102	150	16	25	171	247	-30.8
	Youth	64	65	-1.0	35	23	8	8	107	96	11.1
	Total	1,374	1,315	4.5	1,541	1,380	274	256	3,189	2,951	8.1
Ottawa	Gun	66	45	46.7	101	60	23	13	190	118	61.0
	Crossbow	136	106	28.3	118	92	34	29	288	227	26.9
	Longbow	30	27	9.8	29	28	3	6	62	61	1.1
	Bonus Gun	7	11	-38.2	25	18	8	6	40	35	14.3
	Muzzleloader	7	7	0.0	14	16	1	5	22	28	-20.5
	Youth	8	6	33.3	2	9	2	3	12	18	-32.1
	Total	254	204	24.3	290	224	73	63	617	491	25.7
Paulding	Gun	188	161	16.8	297	200	66	58	551	418	31.7
	Crossbow	153	132	15.9	191	98	40	22	384	252	52.4
	Longbow	78	69	13.0	79	56	15	9	172	133	29.0
	Bonus Gun	41	38	8.8	47	55	16	14	104	107	-2.5
	Muzzleloader	11	22	-49.2	26	44	4	5	41	71	-42.5
	Youth	32	21	52.4	27	16	11	7	70	44	59.1
	Total	507	445	13.9	676	474	153	115	1,336	1,034	29.2
Perry	Gun	381	406	-6.2	585	580	128	126	1,094	1,113	-1.7
	Crossbow	464	381	21.8	283	215	52	50	799	646	23.6
	Longbow	183	192	-4.7	124	130	9	20	316	342	-7.6
	Bonus Gun	62	54	14.1	111	98	20	16	193	168	14.7
	Muzzleloader	48	65	-26.5	88	132	13	24	149	222	-32.8
	Youth	34	50	-31.5	24	26	8	9	66	85	-22.0
	Total	1,179	1,154	2.1	1,221	1,191	230	247	2,630	2,592	1.5
Pickaway	Gun	112	132	-15.4	91	137	18	29	221	298	-25.8
	Crossbow	116	105	10.8	57	82	11	17	184	204	-9.8
	Longbow	67	74	-9.9	33	48	2	7	102	130	-21.3
	Bonus Gun	13	18	-26.4	27	29	3	8	43	54	-20.9
	Muzzleloader	14	21	-32.3	19	32	4	6	37	59	-36.9
	Youth	16	19	-14.3	10	8	2	3	28	30	-6.7
	Total	345	372	-7.2	239	340	41	71	625	783	-20.2

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2020	3-year average	Diff. (%)	2020	3-year average	2020	3-year average	2020	3-year average	Diff. (%)
Pike	Gun	259	272	-4.8	350	351	66	71	675	694	-2.7
	Crossbow	321	334	-3.9	213	204	37	33	571	571	-0.1
	Longbow	155	182	-15.0	70	105	5	15	230	303	-24.0
	Bonus Gun	36	32	11.3	67	63	6	8	109	103	5.8
	Muzzleloader	38	53	-27.8	68	84	12	16	118	153	-22.9
	Youth	29	41	-28.7	17	23	3	6	49	70	-29.7
	Total	843	918	-8.1	789	835	131	149	1,763	1,902	-7.3
Portage	Gun	230	222	3.6	334	254	115	91	679	567	19.8
	Crossbow	485	418	16.0	444	387	140	99	1,069	903	18.3
	Longbow	160	140	14.3	184	177	52	39	396	356	11.2
	Bonus Gun	41	52	-21.2	104	84	36	22	181	158	14.6
	Muzzleloader	22	33	-33.3	44	61	14	15	80	109	-26.4
	Youth	20	23	-13.0	13	31	8	5	41	59	-30.5
	Total	975	955	2.1	1,151	1,101	375	304	2,501	2,360	6.0
Preble	Gun	136	115	17.9	160	129	38	34	334	278	20.1
	Crossbow	207	154	34.7	159	139	31	33	397	326	21.9
	Longbow	103	91	13.2	77	79	16	20	196	190	3.0
	Bonus Gun	23	27	-14.8	34	44	5	12	62	83	-25.3
	Muzzleloader	22	17	32.0	26	41	2	10	50	68	-26.5
	Youth	19	21	-9.5	4	12	1	5	24	38	-36.8
	Total	518	430	20.6	464	448	94	115	1,076	993	8.4
Putnam	Gun	158	124	27.4	187	138	41	37	386	299	29.2
	Crossbow	124	120	3.0	126	89	38	25	288	234	23.1
	Longbow	46	55	-16.9	61	57	10	9	117	122	-4.1
	Bonus Gun	21	17	26.0	24	24	7	8	52	48	7.6
	Muzzleloader	14	9	50.0	11	11	6	2	31	23	34.8
	Youth	25	22	15.4	14	13	14	4	53	39	35.9
	Total	392	352	11.3	425	337	119	86	936	775	20.8
Richland	Gun	504	442	13.9	780	618	206	160	1,490	1,220	22.1
	Crossbow	634	503	26.1	563	427	106	94	1,303	1,024	27.2
	Longbow	263	265	-0.8	248	232	37	36	548	533	2.8
	Bonus Gun	75	80	-6.6	167	156	42	36	284	272	4.3
	Muzzleloader	43	65	-33.8	116	144	28	29	187	238	-21.5
	Youth	47	50	-6.0	37	35	14	11	98	96	1.7
	Total	1,571	1,415	11.1	1,930	1,626	435	368	3,936	3,409	15.4



## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2020	3-year average	Diff. (%)	2020	3-year average	2020	3-year average	2020	3-year average	Diff. (%)
Ross	Gun	453	436	3.8	586	524	100	94	1,139	1,054	8.1
	Crossbow	510	470	8.6	344	296	56	46	910	812	12.0
	Longbow	291	284	2.3	185	197	19	21	495	503	-1.6
	Bonus Gun	67	54	24.1	124	99	17	13	208	166	25.6
	Muzzleloader	48	73	-34.2	107	139	16	19	171	231	-26.0
	Youth	77	86	-10.1	28	39	13	10	118	135	-12.4
	Total	1,460	1,417	3.0	1,385	1,302	226	206	3,071	2,925	5.0
Sandusky	Gun	140	104	34.2	184	108	47	32	371	245	51.4
	Crossbow	207	175	18.5	224	148	52	33	483	356	35.5
	Longbow	66	54	22.2	54	53	9	12	129	119	8.4
	Bonus Gun	13	23	-43.5	45	35	5	6	63	65	-2.6
	Muzzleloader	18	17	8.0	32	32	3	7	53	56	-4.8
	Youth	12	10	20.0	12	7	4	4	28	21	31.3
	Total	465	386	20.6	564	390	124	96	1,153	871	32.4
Scioto	Gun	245	286	-14.2	416	411	78	82	739	778	-5.1
	Crossbow	404	372	8.7	245	216	35	36	684	623	9.7
	Longbow	215	228	-5.6	115	129	14	18	344	375	-8.2
	Bonus Gun	48	46	3.6	87	89	12	15	147	150	-1.8
	Muzzleloader	23	51	-54.9	73	83	7	14	103	149	-30.7
	Youth	41	43	-4.7	22	31	15	7	78	81	-4.1
	Total	981	1,031	-4.8	967	967	162	172	2,110	2,170	-2.8
Seneca	Gun	305	301	1.3	430	406	117	98	852	805	5.9
	Crossbow	278	269	3.3	280	202	55	48	613	519	18.1
	Longbow	104	89	17.3	99	106	21	9	224	204	9.8
	Bonus Gun	51	61	-15.9	88	97	18	26	157	183	-14.2
	Muzzleloader	32	32	1.1	64	54	10	15	106	101	5.0
	Youth	48	40	20.0	34	28	18	11	100	78	27.7
	Total	825	796	3.6	1,002	902	245	208	2,072	1,906	8.7
Shelby	Gun	137	133	2.7	217	175	48	46	402	354	13.5
	Crossbow	153	132	16.2	139	122	35	27	327	281	16.5
	Longbow	85	82	3.7	89	72	9	17	183	171	7.2
	Bonus Gun	22	25	-12.0	54	41	7	12	83	78	6.4
	Muzzleloader	19	17	14.0	24	40	7	6	50	63	-20.6
	Youth	15	21	-29.7	16	14	6	4	37	39	-5.9
	Total	435	413	5.2	542	467	113	113	1,090	993	9.8

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2020	3-year average	Diff. (%)	2020	3-year average	2020	3-year average	2020	3-year average	Diff. (%)
Stark	Gun	307	308	-0.2	524	421	121	106	952	835	14.0
	Crossbow	610	509	19.9	592	468	124	97	1,326	1,074	23.4
	Longbow	191	180	5.9	242	214	29	32	462	426	8.4
	Bonus Gun	72	59	22.7	161	133	31	28	264	219	20.5
	Muzzleloader	47	50	-6.0	79	105	24	23	150	178	-15.7
	Youth	31	36	-13.9	14	25	6	10	51	71	-27.8
	Total	1,269	1,152	10.1	1,630	1,382	339	301	3,238	2,836	14.2
Summit	Gun	97	57	69.2	99	76	31	20	227	153	48.7
	Crossbow	477	410	16.2	456	403	131	99	1,064	913	16.6
	Longbow	136	117	16.2	169	167	38	34	343	317	8.1
	Bonus Gun	24	17	44.0	23	23	4	4	51	43	18.6
	Muzzleloader	7	11	-36.4	14	17	3	6	24	34	-29.4
	Youth	4	5	-20.0	3	3	1	2	8	9	-14.3
	Total	752	621	21.2	770	693	210	165	1,732	1,479	17.1
Trumbull	Gun	394	383	3.0	666	590	200	187	1,260	1,160	8.6
	Crossbow	669	615	8.8	728	520	231	164	1,628	1,299	25.3
	Longbow	181	169	7.3	208	214	61	55	450	437	2.9
	Bonus Gun	89	75	18.1	216	178	54	45	359	299	20.1
	Muzzleloader	24	39	-39.0	78	108	20	31	122	178	-31.3
	Youth	30	30	0.0	27	32	17	14	74	76	-2.6
	Total	1,432	1,364	5.0	1,983	1,705	599	517	4,014	3,586	11.9
Tuscarawas	Gun	665	738	-9.9	1,272	1,174	261	239	2,198	2,151	2.2
	Crossbow	897	784	14.5	819	624	128	103	1,844	1,511	22.0
	Longbow	399	397	0.4	452	398	60	44	911	840	8.5
	Bonus Gun	169	115	47.4	357	235	66	50	592	400	48.1
	Muzzleloader	88	100	-12.3	224	250	32	40	344	391	-12.0
	Youth	101	111	-8.7	81	80	24	27	206	217	-5.1
	Total	2,343	2,267	3.4	3,241	2,798	574	510	6,158	5,575	10.5
Union	Gun	172	130	32.6	200	142	43	38	415	310	34.0
	Crossbow	174	140	24.6	144	114	31	23	349	276	26.4
	Longbow	93	87	6.5	97	90	15	19	205	197	4.2
	Bonus Gun	20	27	-26.8	27	30	5	8	52	65	-20.4
	Muzzleloader	19	19	1.8	20	30	7	5	46	54	-14.3
	Youth	15	18	-15.1	11	9	6	4	32	31	4.3
	Total	500	424	18.0	508	419	109	97	1,117	940	18.8

## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2020	3-year average	Diff. (%)	2020	3-year average	2020	3-year average	2020	3-year average	Diff. (%)
Van Wert	Gun	135	99	36.4	115	87	31	24	281	209	34.2
	Crossbow	95	71	33.8	70	54	24	15	189	140	35.3
	Longbow	31	31	-1.1	31	26	4	5	66	62	6.5
	Bonus Gun	22	21	4.8	15	23	3	4	40	48	-16.7
	Muzzleloader	3	10	-69.0	6	11	1	3	10	24	-57.7
	Youth	14	13	5.0	14	7	2	5	30	26	16.9
	Total	302	249	21.4	256	210	65	56	623	515	21.0
Vinton	Gun	325	387	-15.9	445	535	79	100	849	1,022	-16.9
	Crossbow	377	377	0.1	175	245	44	41	596	662	-10.0
	Longbow	212	222	-4.6	84	144	7	21	303	387	-21.8
	Bonus Gun	60	51	17.6	90	87	11	13	161	151	6.4
	Muzzleloader	49	68	-27.9	82	132	3	18	134	218	-38.4
	Youth	36	47	-23.9	19	28	2	5	57	81	-29.6
	Total	1,063	1,163	-8.6	901	1,178	146	200	2,110	2,540	-16.9
Warren	Gun	149	129	15.8	186	127	33	30	368	286	28.8
	Crossbow	259	243	6.4	214	188	33	35	506	467	8.4
	Longbow	106	115	-7.6	115	109	21	21	242	245	-1.1
	Bonus Gun	21	19	8.6	36	38	4	8	61	66	-7.1
	Muzzleloader	15	29	-48.9	22	36	5	9	42	75	-44.0
	Youth	13	14	-7.1	5	9	1	2	19	25	-25.0
	Total	563	555	1.5	583	512	97	108	1,243	1,175	5.8
Washington	Gun	493	586	-15.9	713	747	155	147	1,361	1,480	-8.0
	Crossbow	545	446	22.3	269	258	45	37	859	741	16.0
	Longbow	244	229	6.7	110	133	8	15	362	376	-3.7
	Bonus Gun	95	60	57.5	165	116	17	14	277	190	46.0
	Muzzleloader	71	107	-33.9	138	183	17	26	226	317	-28.6
	Youth	78	72	8.3	36	40	7	5	121	117	3.4
	Total	1,538	1,510	1.8	1,441	1,483	254	245	3,233	3,239	-0.2
Wayne	Gun	280	258	8.5	484	408	132	106	896	771	16.2
	Crossbow	435	333	30.8	380	298	85	65	900	696	29.4
	Longbow	190	153	23.9	201	157	38	29	429	339	26.4
	Bonus Gun	52	53	-1.9	106	93	26	21	184	167	10.4
	Muzzleloader	20	46	-56.5	67	94	13	18	100	158	-36.7
	Youth	30	43	-29.7	38	26	14	11	82	79	3.4
	Total	1,020	894	14.1	1,293	1,091	313	255	2,626	2,239	17.3

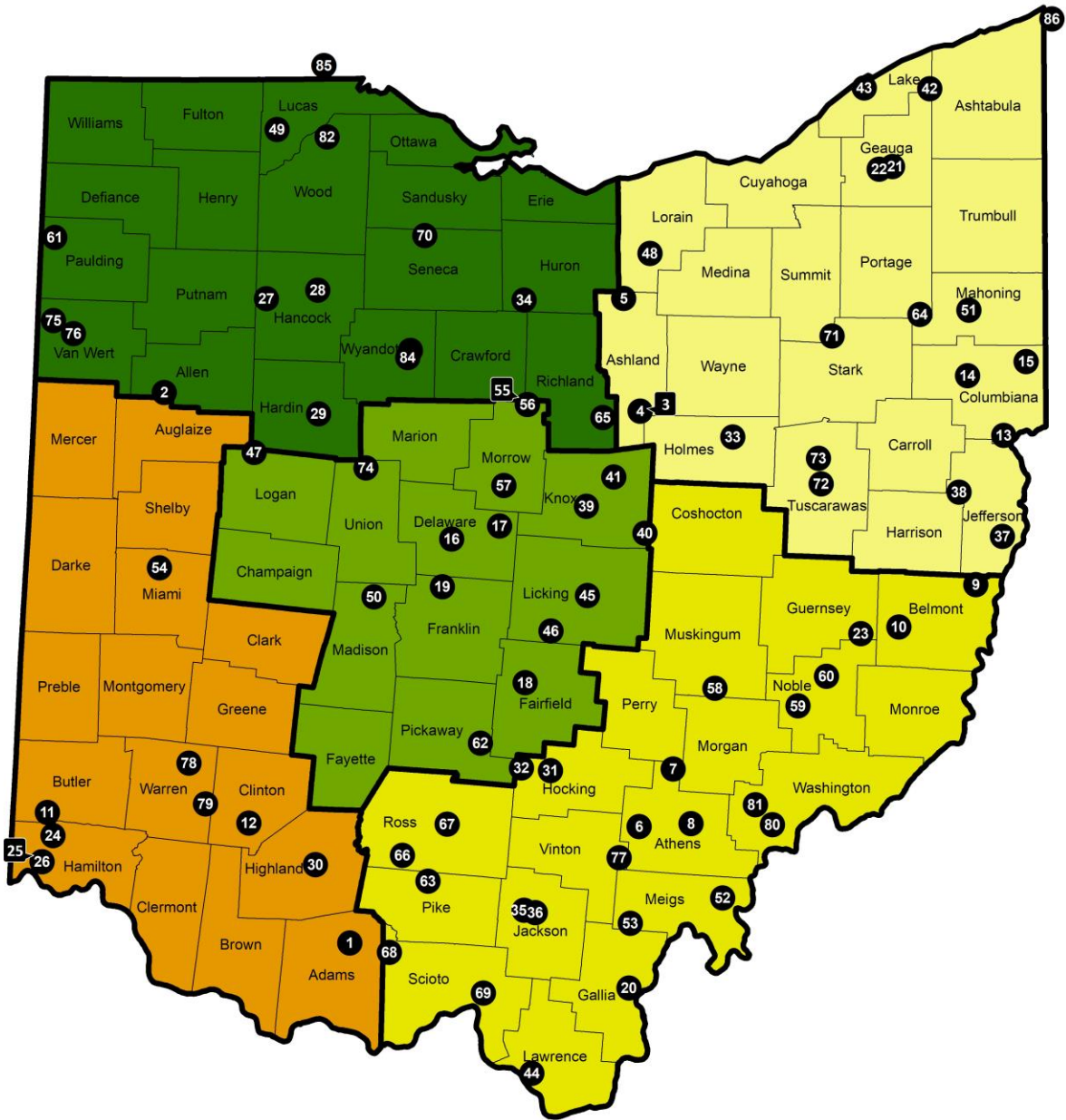
## APPENDIX 2

### COUNTY HARVEST SUMMARIES

County	Season	Bucks			Does		Button Bucks		Total Harvest		
		2020	3-year average	Diff. (%)	2020	3-year average	2020	3-year average	2020	3-year average	Diff. (%)
Williams	Gun	274	260	5.2	361	285	96	73	731	619	18.2
	Crossbow	312	239	30.4	254	169	49	31	615	440	39.9
	Longbow	149	129	15.5	124	106	19	16	292	250	16.6
	Bonus Gun	61	58	4.6	77	73	15	16	153	147	4.3
	Muzzleloader	26	33	-21.2	55	48	5	12	86	93	-7.9
	Youth	24	21	14.3	22	12	5	5	51	37	36.6
	Total	856	749	14.3	902	701	194	155	1,952	1,604	21.7
Wood	Gun	164	142	15.2	205	142	43	31	412	316	30.5
	Crossbow	211	182	15.9	154	116	23	25	388	323	20.0
	Longbow	85	87	-1.9	68	61	12	9	165	157	4.9
	Bonus Gun	22	24	-7.0	36	36	10	8	68	68	0.0
	Muzzleloader	20	19	5.3	23	25	6	6	49	50	-2.6
	Youth	28	20	37.7	17	10	5	3	50	34	48.5
	Total	538	481	11.9	505	397	99	85	1,142	963	18.6
Wyandot	Gun	306	258	18.8	461	351	138	80	905	689	31.4
	Crossbow	223	156	43.3	137	130	36	23	396	308	28.4
	Longbow	113	102	10.4	104	100	15	15	232	218	6.6
	Bonus Gun	32	36	-11.1	68	56	12	16	112	109	3.1
	Muzzleloader	23	27	-13.8	38	51	4	10	65	88	-26.4
	Youth	38	37	1.8	27	21	16	10	81	68	19.1
	Total	767	631	21.6	908	730	243	162	1,918	1,523	25.9

# APPENDIX 3

## Buckeye Big Buck Club Official Scorers





# APPENDIX 3

## Buckeye Big Buck Club Official Scorers

ID	COUNTY	NAME	CITY	PHONE
1	Adams	Bryan Smalley	Peebles	937-779-0180
2	Allen	William Bellman	Lima	419-303-8427
3	Ashland	Jon Byers	Loudonville	419-651-0501
4	Ashland	Lori Byers	Loudonville	419-908-5625
5	Ashland	Steve Reinhold	Nova	419-945-2848
6	Athens	Llyod Culbertson	Athens	740-664-5021
7	Athens	Bill Peneston	Glouster	740-646-5061
8	Athens	Mike Rex	Athens	740-594-7296
9	Belmont	Tom DeVaul	Bridgeport	740-310-0238
10	Belmont	Devin Stephen	Barnesville	740-827-1674
11	Butler	Dave Couch	Hamilton	513-738-8288
12	Clinton	Tony Feldheim	Miland	937-685-4965
13	Columbiana	Bill Lawrence	Wellsville	330-532-4259
14	Columbiana	Kerry Mora	Lisbon	330-222-1840
15	Columbiana	Ray Ward	New Waterford	330-501-0443
16	Delaware	Steve Bohan	Delaware	740-369-1763
17	Delaware	Dave Orndorf	Sunbury	740-965-5233
18	Fairfield	Tom Moore	Carroll	614-204-3334
19	Franklin	Rod Nutter	Columbus	614-439-2874
20	Gallia	Ron Tawney	Gallipolis	740-645-3099
21	Geauga	Dean Charvat	Burton	440-834-4926
22	Geauga	Roger Davis	Newbury	440-564-5092
23	Guernsey	Evan Hastings	Quaker City	740-679-2275
24	Hamilton	Michael Serio	Cincinnati	513-385-7094
25	Hamilton	Robert Wood	Cincinnati	513-604-2151
26	Hamilton	Jennifer Wood	Cincinnati	513-720-7406
27	Hancock	Jason Collert	Mt Cory	419-889-1700
28	Hancock	Robert Ebert	Findlay	567-525-4208
29	Hardin	Gary Oates	Kenton	419-673-0473
30	Highland	Tim Schlater	Hillsboro	937-403-5811
31	Hocking	Jeff Hill	Rockbridge	740-385-1780
32	Hocking	Ed McClure Jr	Laurelville	740-332-0266
33	Holmes	Mary Wilcox	Millersburg	330-674-1553
34	Huron	Bruce Buurma	Willard	567-227-0134
35	Jackson	David Haynes	Jackson	740-988-6278
36	Jackson	Seth Newkirk	Jackson	740-418-5011
37	Jefferson	Ken Bake	Mingo Junction	740-381-4820
38	Jefferson	Jim Williamson	Bloomington	740-543-4367
39	Knox	Adam Cramer	Mt Vernon	614-395-1004
40	Knox	Todd Fogress	Walhonding	740-485-3513
41	Knox	Ed Robinson	Howard	740-507-6722
42	Lake	Mike Irwin	Madison	440-622-5187
43	Lake	Mark McGrath	Mentor	440-352-0999
44	Lawrence	Mike Dickess	Ironton	740-532-0142
45	Licking	Steve Shannon	Newark	740-973-4784

# APPENDIX 3

## Buckeye Big Buck Club Official Scorers

ID	COUNTY	NAME	CITY	PHONE
46	Licking	Randy Weisenstein	Pataskala	740-739-1217
47	Logan	Gary Miller	Lakeview	419-238-6826
48	Lorain	Eric Ferron	Wellington	440-506-3540
49	Lucas	Steve Siegfried	Monclova	419-877-9096
50	Madison	Johnnie Eash	Plain City	614-203-5262
51	Mahoning	Dusty Briceland	Canfield	330-727-9888
52	Meigs	Ken Ritchie	Reedsville	740-985-4377
53	Meigs	Jack Satterfield	Langsville	740-742-0618
54	Miami	Westin Baker	Piqua	
55	Morrow	Frank Grauer	Galion	419-564-8133
56	Morrow	Chip Grauer	Galion	419-295-0096
57	Morrow	Shane Holtrey	Marengo	740-272-6103
58	Muskingum	Greg Smith	Blue Rock	740-607-6142
59	Noble	Michael Lewis	Caldwell	740-630-8894
60	Noble	Tom Smith	Sarahsville	740-732-5042
61	Paulding	Charles West	Antwerp	419-789-9622
62	Pickaway	Ron Elkins	Circleville	614-296-1199
63	Pike	Toby Williams	Waverly	740-947-7252
64	Portage	Jerry Weingart	North Benton	330-420-8859
65	Richland	Carter Quay	Lucas	419-564-4045
66	Ross	Wes Spradlin	Bainbridge	740-656-0785
67	Ross	JR Tucker	Chillicothe	740-779-0888
68	Scioto	Scott Hoffer	Rarden	740-372-2437
69	Scioto	Gene Peach	Portsmouth	740-876-4234
70	Seneca	Dennis Heilman	Tiffin	419-334-1560
71	Summit	Randy Pepper	N. Canton	330-499-4157
72	Tuscarawas	Michael Budd		740-973-1752
73	Tuscarawas	Brett Burrier	Dover	330-447-1437
74	Union	Mike Cline	Richwood	740-262-5982
75	Van Wert	Rob Miller	Convoy	419-203-5510
76	Van Wert	Rick Waltmire	Van Wert	419 203-8011
77	Vinton	John Ator	McAurthur	740-596-5252
78	Warren	Gary Trent	Waynesville	513-897-2117
79	Warren	Darin Woods	Clarksville	513-479-4111
80	Washington	Jim Hill	Vincent	740-293-9002
81	Washington	Ryan Huffman	Waterford	740-516-8078
82	Wood	Michael Thompson	Perrysburg	419-575-4429
83	Wyandot	Will Ogden	Upper Sandusky	419-561-1951
84	Wyandot	Steve Swihart	Upper Sandusky	419-294-5137
85		Bill Nash	Lambertville	734-847-0405
86		David Pasky	West Springfield	814-922-3043